SECURITY ASSEMBLAGES: enclaving, private security, and new materialism in suburban Johannesburg[*]

A research report submitted in partial satisfaction of the requirements of the degree
Master of Arts in Anthropology

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[*] Kindly note that due to the administrative requirements of the university, this official title is an old and somewhat dated. Readers however might be better served with by this newer, more descriptive title for the following report: "Security Assemblages: private security, materiality, and immunity in suburban Johannesburg."

Abstract

This research report explores how private security is materially assembled in suburban Johannesburg. Based on ethnographic fieldwork within a private security company operating across the northern suburbs of Greater Johannesburg, it examines how the materiality of security is intimately intertwined with shaping the socio-spatial terrain of the city. Using a new materialist "assemblage" theory proposed by Jane Bennett, it contends although the materials of private security are designed to protect and exclude, they often work rather differently on the ground, resulting in strange new ways of seeing, moving, and relating in the city.

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Acknowledgements

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INTRODUCTION: A ClearVu of Louis Botha Avenue

Next time you are in Johannesburg, grab a taxi from old Berea Fire Station up Louis Botha Avenue. If you can grab a window seat, you'll get a unique glimpse of Joburg in its busyness and its everyday business. Setting out in the shadow of the Hillbrow Tower, Louis Botha first moves northeast along Parktown ridge, passing on the left the balconied flats in Berea and Bellevue and mismatched brick walls on the edges of posh Houghton. The dusty four-lanes and checkered curbs then turn straight north and drop down off the ridge to barrel into the northern suburbs of the city. A major thoroughfare between taxi ranks in town and Alexandra, traffic is heavy with competition for passengers and every inch of pavement is in play – gas station parking lots, side streets, and the slivers of bus stops at Balfour Park. The speed of the taxis weaving between Toyota Tazzes and armed response bakkies, the noise, the collage of tuck shops advertising Coke and Sunfoil and security shops advertising gate motors and panic buttons in Orange Grove and Highlands North, the blur of walled residences and small office complexes in Highlands North, with their armed response signs for Community Active Protection, all combine to provide a kaleidoscopic portrait for the whirling city of Johannesburg. Through this

hubbub, there runs a long fence of steel mesh from the bottom of the ridge to the top of Bramley dividing northbound and southbound traffic.

As my route to and from fieldwork at 4C private security company, the rhythms of Louis Botha became more familiar. And with each commute, the trip got less stimulating than the first. But the curiously solid and transparent fencing held my fascination. Set into a thin low concrete median, the fence, announced by white plaques as "ClearVu's Invisible Wall," is two meters of pencil thin steel wires, with the wires arranged just less than a finger's width apart. As I learned from the manufacturer's website Clearvu.com, the spacing was intentional designed to be "difficult to cut" and "difficult to climb," but transparent as well, providing "the protection of a brick wall" without the opacity. What sort of company, I wondered, would put so much meticulous thought into a fence? Erected, I learned in the course of my research, to prevent jaywalkers from snarling traffic flow without blocking driver's view of the street, ClearVu's Invisible Wall combination of physicality and optic immateriality was a perfect fit for the busy avenue. But ClearVu, I realized, was more than a specialty product for medians; it is in demand all over the city. Increasingly popular with businesses, neighborhoods, and individual homeowners in the greater Johannesburg area, a sharp-eyed observer will spot "the Invisible Wall" twice more along Louis Botha alone – once around Clarendon Place on Willie St and again around the new Burger King at Fir St. Topped with electric fencing or steel spikes and accented with armed response signs, it can be seen ringing office complexes, private homes, parking lots, and whole neighborhoods across the northern suburbs. Far from unprecedented, the Invisible Wall is just the newest addition to the strange array of security objects deployed across the city of Johannesburg. Writing from the infancy of the post-apartheid

Figure 2: A house in Melrose encircled with ClearVu fencing

in Johannesburg, Lindsay Bremner (1998) noted in her piece on the emerging landscape of Johannesburg how, "[n]ot just crime but the elaborate defence against it – the car-tracking device, the walled suburb, the insurance policy – is becoming the base of the new social economy of the city," marked by "a new security aesthetic [that] dominates: walls, wire, barbs, locks, gates, intercoms, fortifications" (15). More than a decade and a half since the instability of the early post-apartheid of Bremner's survey, this social economy of security has been long entrenched and indeed evolved and mutated the built environment of the city, adding innovations and optimizations through the years. It has continued to proliferate new security technologies like CCTV cameras, analytics algorithms, and infrared sensors, and transformed old ones like electric gates, walls, fences, and electrified wires in new forms. In areas affluent enough to afford private security services like the northern suburbs, this proliferation has transformed the urban space, making the ClearVu along Louis Botha not just a geographic rib for the northern suburbs, but a symbolic one as well, totemic of the presence and valence private security and its increasingly complex materials have in this corner of Johannesburg.

Private Security in Writing: review of literatures on the topic

With the exception of Bremner's work (1998, 2002), a few exceptional academic pieces (Diphoorn 2015, Dirsuweit 2006), and one major literary work (Vladislavic 2009), the vast majority of writing on the topic in South Africa has overlooked the technoscape engendered by private security. Most work on private security has originated out of the international field of security studies. For the most part, security studies' engagement with private security began with the work of Clifford Shearing and Philip C. Stenning (1983) and their examination of private security firms operating in Canada and the United States. Realizing that private security firms could not be treated simply as an appendage to the state's criminal justice system as it had been in the past, Shearing and Stenning observed that private security firms differed from traditional police in that they operated under a distinctly client-centered mandate, which focused on property management and crime prevention rather than investigation or punishment (503). Much of the academic work that followed, both in and outside of South Africa, would borrow points of inquiry from Shearing and Stenning, focusing on questions of how these firms were re-ordering the division of private/public space and their relationship with public police (Berg 2010; Diphoorn and Berg 2014; Goodenough 2007; Irish 1999; Kempa, Stenning, and Wood 2004; Manzo 2004, 2010; Minnaar 1997, 2004). Philip Stenning (2000) and others (Berg and Gabi

2011; Kirunda, de Goede, and Taljaard 2008; Minnaar 1997; O'Connor et al. 2008) were concerned with private security's client-centered mandate and began to examine the effectiveness of existing regulation and proposed new regulatory measures to prevent abuses. Although this scholarship on private security engaged sites around the world, South Africa quickly became an epicenter for the study of the private security phenomena on the continent for two interelated reasons: 1) South Africa has a large and rapidly growing domestic private security industry, and 2) scholars from Pretoria/Tshwane's Institute of Security Studies' (ISS) have produced prodigious amounts of research on the topic (Cilliers et al. 1999; Goodenough 2007; Irish 1999; Kirunda, de Goede, and Taljaard 2008; Schönteich et al. 2004; Shaw 1997).

This prodigious research has produced key insights into the relationship between the emergence of the private security industry in South Africa and the country's recent political history. Firstly, as Jenny Irish (1999) points out, the industry began under the direct cultivation by the apartheid state. Secondly, the private security industry rapidly expanded during the final years of the apartheid and the transitional years of the pos-apartheid (Shaw 1997). During this period, the industry became the fastest growing sector of the economy as South Africans of sufficient means, often white, turned to non-state policing to assuage their anxieties (Bremner 1998:56-57). By 2011, it was the largest of its kind in the world, accounting for approximately 2% of the country's GDP (Diphoorn 2015:5). And thirdly, the transformation of the apartheid-era South African Police (SAP) and South African Defence Force (SADF) causes large numbers of former soldiers and police officers to flock to the industry for jobs as officers and managers (Irish 1999:8-9).

Although indispensable in situating the private security industry within the historico-political context of South Africa more broadly, a significant portion of the work on private security companies, originating out of security studies, has focused on their positions within society, in particular its sometimes tense relationship to the state and the state's presumed monopoly on violence. Viewed as an incursion of the private into public domains, security studies has tended to take a bird's eye, macro-political view of private security. Implicitly and explicitly policy-oriented, its major concerns lay with issues of privatization, public-private policing relationships, and regulation. The materiality of private security, if treated at all, by and large comes into focus only in relation to these larger questions pertaining to privatization of public space (Berg 2010; Diphoorn and Berg 2014; Manzo 2004), the resemblance with the

police (Irish 1999:5), and the appropriation of symbols of state power (Moposa and Stenning 2001).

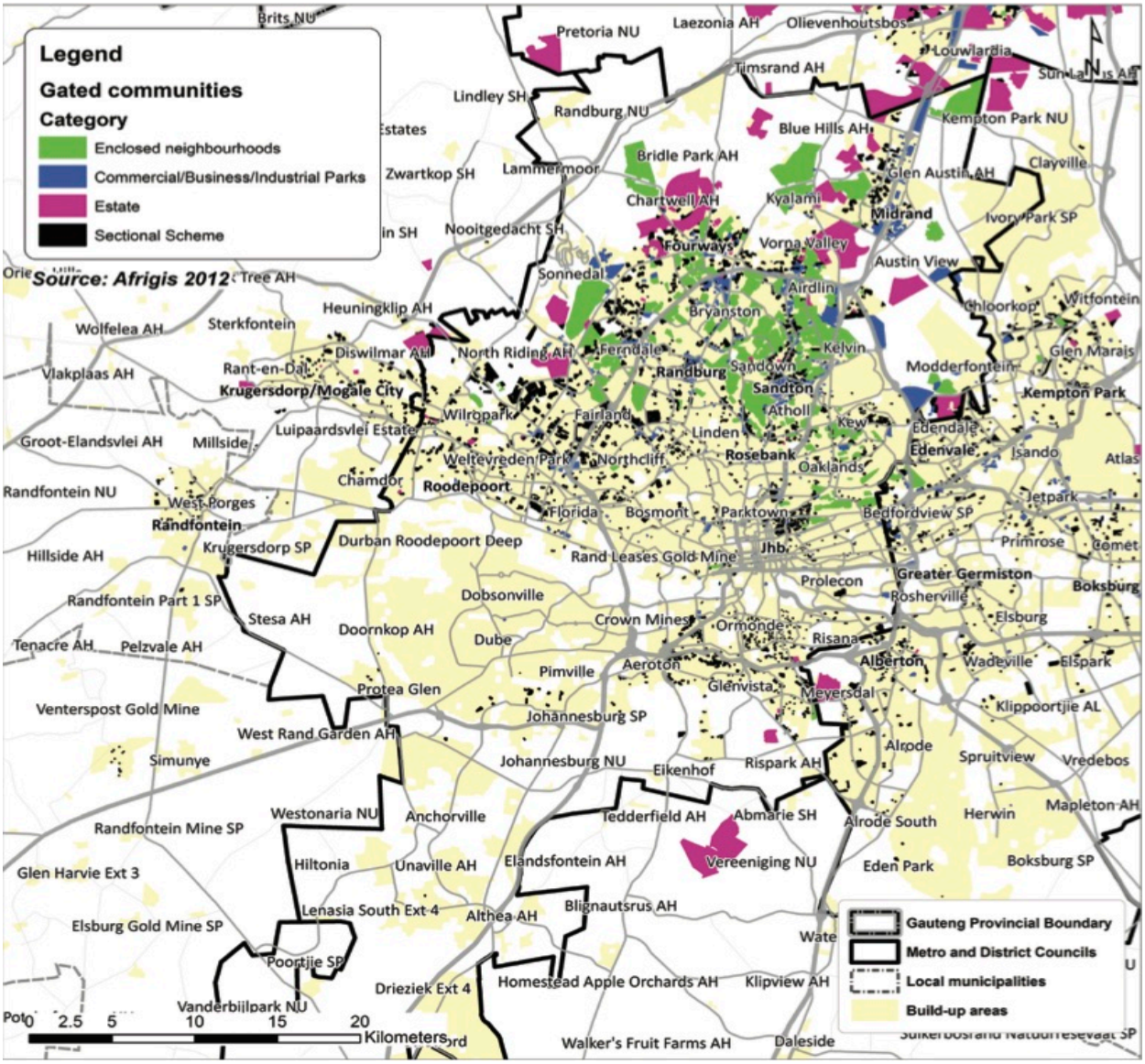

Figure 3: A fracturing city; a map of gated communities, enclosed neighborhoods, and gated residential and complexes in Greater Johannesburg. Note the density of enclaves in the northern suburbs. (Source: Karina Landman and Willem Badenhorst, *The Impact of Gated Communities,* p. 28)

In a related but distinct mode, urban anthropologists (Caldeira 1996, 2000; Davis 2006; Low 1997, 2001), engaged with cities across the globe experiencing socio-spatial "fracturing" or "splintering," have approached private security with a focus on its impact on the character of urban life. Examining the built environment of cities like Johannesburg, they have noted how private security operates within a complex ecology of crime, racialized fear, and fortification that have fractured the socio-spatial fabric of cities.

Conceptualized by Teresa Caldeira as "enclaving," this process, emblemized in the model of the gated community, is not foreign to Johannesburg. Rather, many scholars of South African society and cities (Beall 2002; Comaroff and Comaroff 2006; Hook and Vrdoljak 2002; Landman 2011; Landman and Badenhorst 2012; Murray 2011; Shaw 1997; Steinberg 2001) have identified in the post-apartheid "crime wave," Johannesburg's status as a dangerous "crime-city," the prevalence of "crime talk" and "crime-fear," and private security companies, gated communities, and walled residences the symptoms of this phenomenon of "enclaving" in Johannesburg at large and in particular, the northern suburbs. Tracing the history of the northern suburbs back to its function in the early days of the city as a tranquil retreat for the Randlords from the tremors of the city center, in his book *City of Extremes,* Martin Murray (2011) expands on Bremner's appraisal and describes the sprawling landscape of the northern suburbs as symptomatic of flight and fortification predominantly white. During the late 1980s and early 1990s, many corporations and white residents, he explains fled northwards from the central business district (CBD) and inner city to the region's new economic center in Sandton and its growing suburbs. In these northern suburbs, Murray pithily summarizes "form follows fear," a "splintered" and "schizophrenic cityscape of sequestered enclaves" (135 & 243).

Conceptually, "enclaving" and the exclusionary, fractured city it describes provides a useful global and highly local analytical framework for understanding the position of private security and private security technology in the city and suburbs. But as the prevalence of ClearVu's Invisible Wall suggests, the northern suburbs are not simply fracturing from the greater city through their adoption of private security and its technologies, but doing so in remarkably specific and fascinatingly material (and optical) ways. Moreover, by backgrounding the material nature of security, the literature on "enclaving" risks on the one hand reifying the fracturing city into absolute terms, while on the other hand taking for granted the specific shape and form security take.

Figure 4: A tree in Parktown has grown too close to a wall and has been re-assembled with razor wire

4C Security as an Assemblage

This research report delves into the specificities of the materiality of enclaving in the context of the fracturing city through the example of the mid-sized Johannesburg based 4C Security company. Established in 2003, 4C Security was founded purely as an armed response service made up for clients in a few neighborhoods in the northern suburbs. At the time just a small collection of officers – many of whom are now the directors – "looking for trouble" in their tactical bakkies, the company has grown prolifically, absorbing a security technology and installation company as their technical wing, adding their own twenty-four hour CCTV surveillance service, and expanding to provide "the full suite" of security services for six neighborhoods and dozens of townhouse and office complexes across the northern suburbs, three sprawling gated community estates in Midrand and Fourways, and half a dozen buildings in the Johannesburg CBD. As the company grew, so did the breadth and diversity of their technologies and techniques they deploy for the purpose of security. Since their early days, the company has become a massive human and material endeavor, encompassing over a thousand trained employees, equipped short-wave radios, CCTV cameras, infrared sensors, bulletproof vests, assault rifles, handguns, routers, Ethernet cords, blaze orange jackets, handcuffs, gatehouses, guardhouses, copper wires, antennae, DVRs, two-way radios, tactical bakkies, electric fences, boom gate arms, buttons, and camera posts, analytics algorithms and license plate recognition software, torches, floodlights, and ClearVu fencing (just to name a few). Private security at 4C is not just a concept embedded in a larger schematic of neoliberal governance or public/private dichotomies, but something that is materially assembled – designed and set to function (and dysfunction) through the aggregation of technology, techniques, and human bodies. How can all this materiality with its diversity and its multiple and shifting relationship with humans be examined with any coherence?

Traditionally, anthropology has approached materiality in a constructivist manner. As Paul Manning (2012) points out, this constructivism posits that objects "are both ordered by people into cultural systems ('ordering things') and reciprocally act indexically to order people into those systems ('ordered by things')," but is necessarily limited in that it fails to recognize that the material qualities of objects have import on how they are ordered and how they in turn order people (4). Further as security studies scholars Benjamin Gould, Ian Loader, and Angélica Thumala (2013) working from the framework of Latour's actor-network theory suggest,

constructivist understandings fail to account for how objects like people can become "actors," "'delegates' for their owners/users, 'prescribing' conduct of others and thereby quietly playing the part in the assembly of subjectivities and social relations" (978). Also pulling from Latour, Jane Bennett (2004, 2005) proposes that rather than discrete fields, culture, people, and objects and their material qualities are better understood as operating within *assemblages*. Using the example of an electrical power grid, Bennett understands an assemblage as a heterogenous collective of "many types of actants: humans and nonhumans...nature, culture, and technology." Although organized towards a certain purpose, assemblages are not captured by human control and their designs, but rather are suffused with the agency of all of their constitutive actants as well as "energies and countercultures that exceed and confound it." Assemblages are "historical and circumstantial," characterized by a "contingent status [that] says nothing about its efficacy, which can be quite strong" (2005:445).

Although other scholars (Brown 2006; Haggerty & Ericson 2000; Lippert 2006) working in security studies have deployed the same term in its original Deleuzean sense, I believe Bennett's conceptualization is closer to the reality of 4C Security's apparatus for several reasons. Firstly, 4C apparatus of objects operate within a wide range of technical and cultural situations; in its ability to accommodate constructivist, semiotic, and new materialist perspectives, Bennett's *assemblage* is then well suited to the multiple modes of objects in the apparatus. Secondly, an *assemblage* is open to factors – "energies and countercultures" – outside itself, allowing an examination of 4C Security apparatus within the historical and socio-political dynamics of the fractured city identified by scholars like Bremner and Caldeira. Thirdly, an *assemblage* is open to many actants, human and non-human, understood without an *a priori* assumption of which is more powerful than the other. In 4C Security, the relationship between the objects in the apparatus and the employees also involved in doing the work of security is as we will see mixed, shifting, and sometimes uncertain, making assemblage an apt conceptualization. Fourth and finally, as Bennett's choice of the model of the electric power grid (and of the blackout) plays out, an *assemblage* is something that is designed, sometimes meticulously, for a specific purpose, but in its contingent status an assemblage can lapse or stray from its intended design. As such, an *assemblage* must be understood as existing in three possible, interlinking, even overlapping ontological states: its design, its on-the-ground function, and its on-the-ground dysfunction.

Notes on Aim, Terminology, and Scope

Heeding this, this research report explores 4C apparatus – objects, humans, ideas, discourses, technologies, and techniques involved in protecting and securing their clients – as an assemblage. Using the term *the 4C private security assemblage* – often abbreviated to the 4C assemblage, the assemblage, or in places delimited its constitutive parts, the home security assemblage and visual surveillance assemblage –, it situates itself as a materiality-focused descendant of Bremner and Caldeira's work, asking the question of *how* the design, function, and dysfunction of security assemblages impact the socio-spatial economies of the city from the specific vantage of one company's assemblage. In short, I try to answer how *the 4C private security assemblage* works and examine the ways it affects how people relate to each other and to life in Johannesburg at large.

For the sake of clarity and brevity however, my exploration is limited in two ways. While 4C operates in Johannesburg CBD and in gated communities in Midrand, my analysis is geographically limited to their services for homes and businesses in the northern suburbs where I collected the vast majority of my research data. Additionally, although it regularly interacts with people (clients, outsiders, domestic workers), objects (streets, mobile phone towers), and other entities (police precincts, other private security companies), in my exploration the assemblage is institutionally limited focusing mainly on 4C itself and in particular those employees and the objects, techniques, and technologies directly used by the company for the purpose of security. The company's marketing and payroll departments for example, although a part of their institutional structure, are not considered with any depth in this research report.

Methods and Methodology: access, limitations, and data collection

The research which provided the content for this report was collected over eleven months of ethnographic fieldwork inside the company, which began in late March of 2015 and ended in early January of 2016, encompassing hundreds of hours. Early March 2015, I sent out over a dozen emails to private security companies across the Gauteng area explaining how I was interested in conducting research on how security technology and systems impacted the daily lives of homeowners and private security employees in the city. Andrew, 4C's managing director, was the only contact to reply, commenting briefly that the project was interesting and we should meet to discuss it. On a rainy day in late March, I visited 4C's office for the first time and presented my research aims and anticipated methods to Andrew in the company's small

conference room. Being a master's student himself through UNISA, he let me know he and 4C, somewhat unexpectedly, would be open to my research, provided I not disclose the identities or personal information of their clients.

From that point onwards, my access to the company was only limited by safety concerns – several times the tactical unit headed to a potential gun fight and could not spare the extra bulletproof vest to take me along – and by people's willingness to tolerate my questions in that particular day and time. For a company operating in an industry with rough-and-tumble reputation, I was surprised to find that most 4C employees were welcoming of my presence and would routinely take time out of their days to explain their everyday work – sharing its challenges and their insights. I suspect my position as a white American was in many ways responsible for how openly people conversed with me. Intrigued by my apparent cluelessness and curiousity about South African life, black employees were often happy to educate me both in the details of the industry and finer points of Johannesburg and South African society. In other moments, my whiteness allowed white employees and managers to converse inside whiteness, sharing the "politically incorrect" without risk. More generally as an outsider, my ability and willingness to chat helped break up the day for many employees, especially those working long shifts. But perhaps more significant than any of these factors, as a straight white man, I had a level of comfort in the predominantly male company and had little trouble occupying the various spaces of the company without piquing suspicion.

But even as it opened different possibilities, my position as an American was not without limitations. From the outset of my research, my lack of fluency in Zulu or Afrikaans would be a major obstacle in understanding the immense social complexities at 4C. There are jokes, phrases, and moments that simply do not translate well into English, while there are also opinions and truths that can be said in Zulu that are not translated. Although I did my best to surmount this linguistic barrier – at times pestering informants for second and third translations of interactions and conversations –, it is undoubtedly a methodological limitation in my exploration. Further, not having been raised in South Africa, I am not always as attuned to the finer nuances and greater significances in South African cultures as your average South African.

Alongside these culturo-linguistic limitations, I was conscious throughout of the potential pitfalls of doing ethnography which is methodologically tuned to the study of human culture from a new materialist analytical framework which is premised theoretically on decentering the

human. Balancing my focus on the materiality of security and the humanity of security was the most significant methodological and stylistic challenge in the research and writing of my exploration. In the end, I was most convinced that Bennett's horizontal treatment of human and non-human actants was best suited to draw out those insights which erupted from the site. And as a result, I was cautious of letting my human informants over-determine the design, functions, and dysfunction of the objects, technologies, and techniques. And so, I complemented my research inside the company with walks and photographic surveys of the areas of the northern suburbs in and nearby where 4C operates in order to gain a feel for how the materiality of the security assemblage impacts the landscape of the suburbs.

But that being said, in terms of sheer hours spent researching the overwhelming majority of research was occupied by participant-observation of and with people of 4C. Given the day-to-day busyness of the company, I often simply tagged along with informants on their daily routines – accompanying guarding supervisors, tactical officers, and technicians on their rounds, hanging out in the company's control room, and chatting with folks on the deck of the company's parking lot as they smoked and discussed the week's plans and issues. Due to transport logistics (I had only basic familiarity with taxi routes in the city and no access to a private vehicle), most of my participant-observation occurred in 4C's main office or with employees that frequented the office with weekly regularity. In free spaces of time, I was able to conduct informal and semi-formal interviews focusing on their life in the company, their understandings of the company's systems, technologies, and techniques, and the cartography of security in the northern suburbs at large.

All data was collected via a three-staged note taking system. During photographic surveys and participant-observations, I jotted short notes in a small journal as often as possible. These notes were then transcribed electronically later that day or the next morning into chronological diary-style entries which are reproduced in this report as indented quotations. Thirdly during the formulation of this report, I revised these diaries, drawing from my memory and journal notes for clearer descriptions of technical arrangements, more accurate quotes, and less redundant phrasing. The semi-formal interviews were manually recorded in my journal without audio recording. With regards to my human informants, all mentioned have been anonymised through pseudonyms. 4C Security itself is an anonymous acronym for the actual company in question. All photos unless otherwise cited were directly taken by me with the permission of those photographed. In order to maintain anonymity, I have refrained from

including the faces of anyone pictured. Finally, I have altered the geographical areas where sensitive events like shootings, robberies, and other crimes have occurred in order to protect the privacy of the persons and places involved.

Structure of the Report

Structurally, the following research report is thematically guided and strongly informed by its ethnographic material. Divided into the three prominent areas of the company's services: CCTV surveillance, guarding and armed reactions, and home security installations, it attempts to describe how the 4C assemblage is designed and functions (or dysfunctions) and provide a sketch of its impact on the socio-spatial economy of the northern suburbs through three ethnographic chapters. Although wide-ranging, the chapters can best be read as interdependent ethnographic reflections on complexion of the assemblage.

My first chapter, titled "Seeing Securely: surveillance, suspicion, and the murk of the 4C assemblage," looks at CCTV surveillance through the lens of the private security company's control room W0 (say "whiskey zero"). Through an ethnographic look at the CCTV controllers, employees who work in W0, it demonstrates how although designed along a fantasy of constant and precise vigilance under which suspicious activity becomes easily visible and knowable, the unpredictability and unreliability of the technologies and techniques deployed within CCTV surveillance in reality suffuse the controllers' task with blindness and overexposure. Using Sarah Nuttall's (2009) work on the significance of the "visible/invisible," "the surface/the underneath" in African cities like Johannesburg, it explores how the controllers have developed their own methodologies for seeing and knowing "suspicious activity." It argues that in W0, not does the terrain of the suburbs become fragmented and recalibrated in the eyes of CCTV streams, but in a similar manner, ways of seeing and knowing general themselves become reconfigured and fragmented.

My second chapter, titled "Rhythms of Security: sjamboks, bullets, sleep, and speed," examines guarding and armed reaction sectors of 4C security assemblage. Noting how the 4C assemblage at large seems to cultivate situations of un-health, violence, and injury, it contends that the assemblage depends on its capacity to animate the bodies of its employees into painful states of inertia and perpetual movement. Using Henri Lefebvre's (2004) method of *rhythmanalysis* and the connected concepts of "arrhythmia" and "eurhythmia," it argues that the assemblage integrates its employees into its design via rhythms through technologies of

surveillance and discipline. Belying the traditional model of technological and biological integration, understood to enhance or invigorate human experience, these rhythms engender situations of negative agency for 4C employees, a situation where bodies work more like the technologies that surround them than the human beings they are.

My third chapter, titled "City of Bubbles: domesticity, (in)visible walls, and the openings in home security," examines the measures deployed by 4C technical wing in the service of home security for their clients across the northern suburbs. Using Caldeira's (1996) work on the increasing primacy of the wall in urban spaces like Johannesburg as its socio-spatial framework, it explores how the assemblage begins with a desire for fortifications which through a collection of practical, domestic, and aesthetic concerns is interpenetrated with openings, lines of vision, and temporal arrangements that are more "bubbles" than barriers. Oscillating between enclosure and openness, fragility and impenetrability, it argues that home security rather than a complete closure of the city from private life becomes a partially foreclosed relational interface between the resident and the city.

Finally, my conclusion, titled "Biometrics and Biopolitics: designs and (dys)functions of *immunization,"* refrains from the traditional practice of explicitly summing up the previous work. Attentive to the strongly ethnographic nature of the three previous chapters and cautious of overanalyzing their specificities, I offer a hermeneutic tool for understanding the 4C security assemblage. Reading the biopolitical theory of Roberto Esposito, the conclusion perhaps can be best read as a retrospective meta-narrative for the preceding chapters. It attempts to theorize the shape of the assemblage's design, functions, and dysfunctions as a means ethico-political intervention with eyes towards alternative ways of life.

Figure 5: A September morning at the CCTV desk in "whiskey zero"

SEEING SECURELY: surveillance, suspicion, and the murk of the 4C assemblage

The floor of W0 is a tangle of wires. Sprouting from short-wave radios, porcupine-like routers, glazed monitors, IP phones, and PC towers, live wires knot with disused ones and snake around the edges of 4C's control room, doing the electron-by-electron work of private security. If 4C was a body, W0 – said "whiskey zero" – would be the brain and these wires the nerves. No matter the time of day or night, W0 and its wires are working, receiving information from around the company's many sites and relaying it to the three controllers at their screen-laden desks. The four LCD televisions and two computer monitors displaying eighty-one moving polaroids at the front of the white room are the final destination for many of these wires. Up close these eighty-one CCTV streams provide tiny windows into the northern suburbs of Johannesburg: an unmoving ornate steel gate at the end of a tan cobblestone driveway, the profiles of drivers in suits and sundresses passing haltingly through a boom gate east of Sandton CBD, the arms of a turnstile pedestrian gate set into a ClearVu neighborhood fence, a black gardener in blue overalls collecting leaves from a pristine green strip of lawn.

The 4C security assemblage – objects, humans, ideas, discourses, technologies, and techniques involved in protecting and securing their clients – at large is sprinkled with the language and business of visual surveillance – reactions officers and "spotter" guards are bombarded with lookouts for suspicious vehicles, security company signs urge suburbanites to "call it in" when they "look twice," others signs warn passersby "You Are Being Watched." Private security control rooms like W0 are the undisputed epicenter for all things visual surveillance. Look up at any of the thousand cameras in Johannesburg – set along walls, on poles

near boom gates, or above the magnetic key port before the gate of an office park – if someone is actively monitoring it, chances are they are sitting in a room like W0, attempting to identify suspicious activity within each relayed stream. This arrangement of round-the-clock electronic visual surveillance, known in the industry as "off-site monitoring" is a major selling point for private security in Johannesburg. Some Gauteng private security firms like Vision Tactical and 24/7 advertise this optical vigilance in their company names, while others foreground their surveillance services in other ways like SOS Pro Tec Sure, whose logo is a pair of glaring red and yellow eyes, framed with their tagline "watching over you."

This drive towards greater visuality is big business for private security companies perhaps precisely because for many amateur and professional observers of the African city so much of the city remains beyond a veil unseen. Reading the work of urban ethnographers like

Abdou-Maliq Simone and Filip de Boeck, Sarah Nuttall (2009) in her book *Entanglement* on cultural and literary formation in post-apartheid South Africa points out how "in recent accounts of the African city, it is the relationship between the visible and the invisible which gives the city its identity and presence; the interplay between what can be seen and what surmised, between the first and the second city, a city that reveals itself and one which bathes itself in shadow" (83). Although accounting for much of the socio-cultural dynamism particular to the African city, in the "crime-city" of Johannesburg the stubbornness of invisibility of the city and the uncertainty it engenders presents a problem for private security. The unseen's potential to harbor criminality spawns uncertainty. The job of the streams of W0 and the controllers who are charged with monitoring them is to roll back the unseen, to multiply the visible at the cost of the invisible.

This chapter delves into the practical details of this quest for visuality. Through an ethnographic look at W0 and its collection of people, cameras, wires, screens, analytics software, and more, it contends that the fantasy of constant and effective vigilance sold by the marketing of private security is still mired in the practical and epistemological pitfalls which originally capture the character of the African city, albeit in a more roundabout manner. Although the

assemblage's proliferation of cameras and human eyes enables W0 to decrease how much of the northern suburbs remains invisible to the workers of security, it does not necessarily increase how easily criminality is apprehended. Rather more often than not, the objects and technologies involved in the visual surveillance and the environment they create in W0 work to militate against identifying "suspicious activity." In response, the controllers of W0 are left to develop their own methodologies for 'seeing securely,' grounded in the production of sociological knowledge around how what Sarah Nuttall terms "the surfaces" and "the underneaths" of Johannesburg operate. Contending with the visual and social ambiguities of pixels, car windows, disguises, the post-apartheid suburb, and the racialized body, the 4C assemblage then reconfigures not only how much of the northern suburbs are seen, but in a fragmented manner recalibrates ways of seeing and knowing in general.

The Scene of W0

At the end of a long white hallway on the top floor of an unassuming concrete building in Wynberg, W0 is biggest and the liveliest room in 4C's offices. No matter the time, W0 is full, murmuring with a clutter of monitors, wires, radios, flashlights, other unidentifiable electronics, and at least three of 4C's eight controllers. Enclosed behind a magnetically locked glass door, the room is divided by four blonde tables, three of which correspond to the controller's three basic duties. Although they can move between duties, on most days Zanele, Michael, or William can usually be found at the guarding desk, organizing the shifts and movement of the company's guards; Benjamin, Donald, or Thulani man the reactions station, coordinating with the armed reactions officers on-the-ground in their "tactical" bakkies; and Welcome, Sibu, or sometimes Thulani or Donald occupy the CCTV controller's chair in front of the central surveillance array of screens and monitors, checking the streams for potentially "suspicious activity" or behavior that the reactions controller should send a vehicle to investigate. Although all three controllers are integral to the operations of W0 and the company at large, it is the CCTV controller's chair that is deemed most important. Lunch breaks are staggered and the reactions radio is often moved so there is always someone at the CCTV station, keeping an eye on the streams at all times. Ryan, a W0's dedicated technician, is the only non-controller and white person who permanently housed inside W0. A white man in his mid-forties, Andrew, the managing director in charge of W0, will wander in at least once a day to check in, noting technical issues and relaying information on new operations or procedures. Besides Welcome who served in the

British military for ten years beginning in the late 90s, all the controllers have all lived their entire lives in South Africa. Each have been working in the private security industry for 5+ years, beginning either as guards like Zanele, armed reactions officers like Sibu, or controllers for other companies.

In the quiet moments, conversations about the police, politics (local, national, and international), about rude and unreasonable clients, difficulties with newly installed technologies, and "hits," as crimes are termed, in the company's areas help quicken the 12-hour shifts. For Welcome and Thulani, educating the visiting American ethnographer on South African social history is also a popular pastime. Having worked years of 12-hour shifts with one another, the people of W0 have a warm familiarity with one each other that fills the room. When they are not busy, the rest of the office, particularly those from guarding management and payroll charge, like to come into W0 to hang out, especially in those slow hours late in afternoon on Fridays. For my time at 4C, W0 was my home away from home, the place where I would spend hours-on-hours hanging out and "talking nonsense" with the controllers. At the end of long days "on-the-road" researching the technical, guarding, and reactions wings of the company, I would always come back to W0 to hear and share the events of the day, recent "hits," and what new technologies were being tested and which of those was a headache for the controllers. But even with this camaraderie, W0 can be an excruciatingly boring place. Long stretches of the day can pass glacially without anything of note happening. But by the same token, busy moments can erupt at any time from the blink-blink-blink of a electric fence alarm, the ringing of one of W0's four IP phones or half dozen cell phones, the CCTV analytics sounding a siren, or "a lookout" from the company's Whatsapp group or the shortwave radio tuned to the control room of 4C's sister company. Commonly, it is a combination of all of these things and W0 becomes a discordant symphony with the three controllers acknowledging alerts, answering calls, consulting worried or disgruntled clients, radioing reaction vehicles to respond, and relaying information to each other – rapidly alternating between shouted English and Zulu depending on the audience, the urgency, and specificity of what needs to get done.

Blindness and overstimulation: agency of the assemblage

The regular cacophony of the room is only one challenge among many for the CCTV controller's task of identifying "suspicious activity." Foremost among these other challenges is the sheer number of streams that must be tracked. As noted above, when all of 4C's cameras,

wires, antennae, and software interfaces are properly working, there are eighty-one streams providing tiny moving polaroids of the northern suburbs. Only a small portion of the total CCTV feeds accessible directly from W0 and an even smaller portion of the cameras running in 4C properties and neighborhoods, these eighty-one concomitant pictures – a number which will certainly increase into the triple digits as the company continues to grow – are basically impossible to monitor individually with any thoroughness, precisely because of the almost constant flow of activity they record and display. There are some cameras that peer serenely into the quiet and mostly uneventful interiors of driveways or front gates, but those located at the front gates of office parks and along boom gates are flurries of color and movement, especially during the week and rush hour. Those two dozen cameras which monitor roads and streets register pedestrians and speeding car once every minute or so.

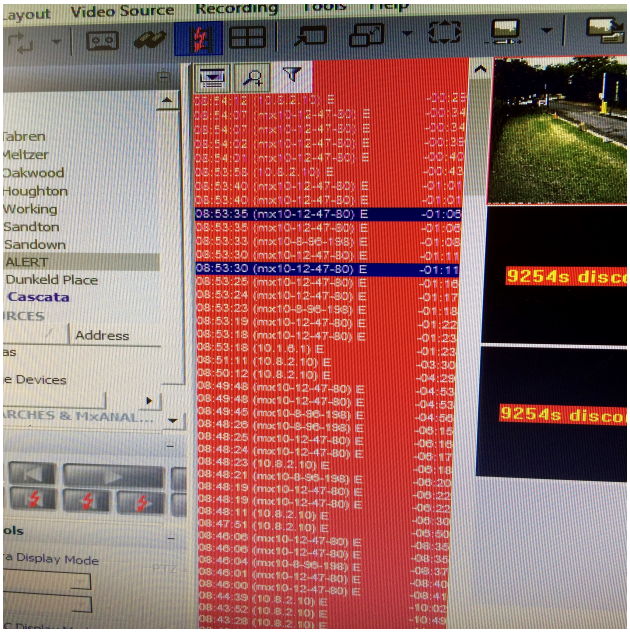

Figure 6: The guts of analytics: W0's interface reveals forty-one triggers over a single ten minute period on one of four of their analytics programs.

In order to save the controller from the exhausting and ultimately impossible task of registering and examining all movement on each individual window, one fourth of the streams, Andrew pointed out on my first visit, are equipped with an analytics software program, equipped with algorithms to detect movement within their frame. When it detects movement, the software boxes the stream frame in a blinking red and highlights the moving object with a red, blue, or yellow rectangle. Alongside these visual cues, the program will chirp, honk, and trumpet swoops in tones corresponding to the type of movement it detected. Although this calibration is a pithy design feature, it hardly makes any practical impact in locating suspicious activity. The frequency of movement causes the tones to blend together, often go off one on top of another. To boot, the noise of the analytics is not attached in the controller's minds to their specific message. Welcome, one of more experienced controllers, was surprised to learn from me that Andrew and Ryan had told me that the different tones meant anything specific at all. The

noise is for Welcome and the other CCTV controllers simply the program's way of calling their eyes. As Donald plainly explained to me about the meaning of one blinking tone: "this thing it waves at you to show you something."

Partially because of its effectiveness in detecting movement, the analytics software's tactics of sonic waving and boxing motion are largely ineffective in helping locate suspicious activity. More often than not they simply glom onto a swiftly passing car, pedestrian strolling down the middle of the street, or the client's dogs as they shift their position in the sun. Other times the software will pick up on the shadows of trees, mistaking the shifting spots of sunlight for objects moving along the pavement or a branch moving in the wind. One day in July, Sibu chuckling pointed out to me how one analytics stream was registering a tiny river of rainwater tumbling downhill past a client's gate following an early morning storm. Aware of the overzealousness of the analytics software program, the CCTV controllers rarely look up in reaction to the tones, particularly if they are busy on the phone with a client, sorting out paperwork, or talking with a visiting ethnographer. As Welcome summarized diplomatically one afternoon in June, "these analytics are basically bullshit, they don't make sense."

Ineffective in helping locate suspicious activity, the analytics software does have one major effect: it adds yet another note to the mashing hubbub of W0. The sensory overload of the many streams and oversensitive analytics is a problem which Andrew, the director in charge of W0, acknowledges. One winter morning, Thulani and I had been pestered by a siren that had been triggering every few minutes for no discernable reason. I commented to Andrew, who was passing through the control room for the moment, "It seems like there is constantly something going off. It is difficult for these guys to respond to all of it." He admitted readily, "Yah, there is too much stimulus. This is something I have been thinking about for a while. We have to cut down, there is too much sensory nonsense going on." But even in the midst of all this noise, its rare to see the controllers' frustration surface. Whereas three hours at the CCTV table was more exhausting to me than any six hours on-the-road with guarding supervisors or tactical officers, the controllers are able to sift through W0's cognitive trash of the assemblage with steady ease, coolly dispatching vehicles and calling clients in the midst a dull thrum of chaos. To outsiders their ability to tolerate to this level of stimulus is remarkable. Andrew related a story of a visitor who came in to help design the control room in their new offices:

> You know I brought in a guy, who is designing our new control room, he is actually the same guy who did O.R. Tambo air traffic control. He was in here for five minutes and he told me, "I actually cannot believe what these people are doing." It is incredible; it is an insane environment!

Usually too busy and stoic to acknowledge how much this insanity is clouding them, the controllers will accept the admiration albeit with characteristic nonchalance. Zanele summed up their attitude on the overstimulation when she told me with a tinge of pride, "we have gotten used to it." But after noticing the controllers commonly ignore analytics alerts, I often wondered if the controller's ability to "get used" the audio-visual noise of the CCTV desk has desensitized them from the rare valid signal.

Desensitized from the din of the design of the CCTV or not, the controllers have also gotten used to how often their visual surveillance technologies fail to function according to design, partially blinding their attempts to identify suspicious activity on a daily basis. On the dozens of days I spent at 4C, I can only remember one or two where all of the eighty-one streams were functioning properly. More often there are swaths of the screen that were blacked and grayed out. In one instance, the six streams, which covered the neighborhood of Petervale, were out for most of August and all of September. Andrew charged Ryan with diagnosing the underlying issue. Noticing how at certain moments the analytics software would intermittently trigger without a visual input, Ryan theorized to me that the outage was due to a spotty connection caused by the construction of a new building in downtown Sandton. Obstructing the path of the radio antennae on the roof of the office, the building had cut the cameras in the northwest suburb from their receivers east of Sandton CBD. But when the antennas were shifted a week later, there was no change. In fact, it had been the local recording device, the on-site DVR, which had failed. But the replacement DVR was only purchasable from the U.S., and so the Petervale streams were dark for six more weeks as the replacement made its slow journey across the Atlantic and through customs. Although in this instance the dysfunction lasted particularly long, new technical failures pop up weekly. Only during those spring and midsummer months of loadshedding, when dozens of streams could go dark with the ticking message – "CHECK CONNECTION, 8515s disconnected" – could anything rival the havoc wrought by these failures.

But even those streams that are running on uninterrupted connections are snarled with the quality of the transmission. Many streams pause and stutter, at times a minute or more delayed

from real-time. A car coming down a surveilled road will pass on three streams in quick succession, only to appear and quickly disappear on their delayed neighbor stream. Other streams will freeze for significant stretches of time showing a geometrically wrought steel gate shadowing a driveway with the midday light until late after sunset. These temporal stutters are worsened by the poor resolution of the readouts. Already quite small, the streams are badly pixelated due to a director's decision to lower the data bandwidth costs of W0. Streamed in the lowest possible quality, pedestrians, already made small by the small postcard-sized streams, become splotchy human-shaped blobs and the foliage of trees become fingers of pixels. At night, these deficiencies are magnified as a majority of the streams switch to grayscale to compensate for the lack of light. Rendered dichromatically, objects flatten into surfaces, and security floodlights and the headlights of passing cars flash with blinding glares. On one night in May, I noticed that in front of one camera lens a spider had made a web. The presence of an object so close threw off the camera's focus and almost entirely blocked out the monitored street. Although invertebrate obstructions are difficult to engineer out of existence, 4C has been selectively deploying new top-of-the-line cameras that push out small amounts of light from small infrared or LED bulbs to allow streams to stay in color throughout the night. But too much light can create its own issues. The highveld sun can scorch northern-facing cameras, turning green lawns into photo negative purple on their streams. Sun visors and adjusted angles can help to lessen the splotchiness, but the overall effects of the sun, especially in spring, summer, and fall, cannot be escaped.

Rather than a boon for the controllers's ability to see and apprehend "suspicious activity" then, the multitude of streams, multi-tasking, outages, overstimulation, underexposure, and routine blindings more often act like an affliction on their eyes and minds. In the form of unanticipated design effects and frequent dysfunction, the audio-visual whirlpool that is the CCTV desk testifies to what Jane Bennett (2005) calls "the agency of the assemblage," wherein objects can exert creative force on the humans and objects around them beyond human intention or design (445). On the ground, this agency militates against the fantasy of the unblinking eye, seeing and perceiving suspicious activity in all corners of its superhuman gaze. Over-stimulated and partially blinded, the controllers of W0 look onto a shattered and low-resolution Johannesburg, that shouts incoherently, a city fragmented into bits and pieces of past and present, flashing between bright light and murky dark, and populated by the small, shadowy, and

sometimes undecipherable. But charged with reading the canvas of this splintered city, the controllers have had to develop their own heuristic methods to do the job of 'seeing securely.'

"Criminals don't wear shorts:" surface readings of bodies

On the afternoon of the last Friday of August, I found myself leaning against the wall outside of W0, gratefully drinking a mug of coffee after a day on the road with Eric, the head of 4C's technical wing and listening to Eric, Andrew, Ryan, and the tactical team, Colin and Mandla debrief the week of crime and security in Johannesburg. In the midst of a conversation about the so-called "Rolex gang," Eric interjected laughingly, "did you ever notice that criminals don't wear shorts. They don't!" The group chuckled; Eric insisted through a grin, "criminals don't wear shorts. In the morning, they don't put on shorts or slops." "Actually," Andrew commented referring to an earlier conversation, "I was watching this footage of the mall. And this one was, this guy had shorts."

In the ebb and flow of work and life at 4C, a joking debate over the relationship of shorts and criminals is a minor footnote in a major story. Far from a funny tangent, the ability to read who and what looks criminal is one of the everyday skills of private security workers. Fluency in how criminality looks is so basic that when asked to elaborate on it, tactical officers like Connor talk as though it's an innate instinct – "ag, you can just *see* them, bru." Although seemingly covered in mystery, the common parlance in W0 reveals that their methods of seeing and knowing criminality are involved in intense attention to the body, in particular its race and gender. "Lookouts," the alerts W0 receives and disseminates about for potentially suspect vehicles, are almost always bracketed with racial and gender information in the NATO phonetic alphabet about the suspect drivers and passengers. Radio calls like "Lookout for two Bravo Mikes in black Toyota Yaris reg. plate Delta, November, 8, 2, Victor, India, Golf, Papa" and "black hatchback vehicle with three Bravo Mikes confirmed armed," fly through the air in the control room. At certain moments, a suspect's race and gender become the *sine qua non* of their lookouts:

> Sibu was at the CCTV desk today surveying the cameras and received a call from a client reporting that a suspicious individual was hanging around the front of her gate for the past half hour. The call lasted all of three minutes, but was dominated by Sibu's patient appeals for her to provide a description -- "can you tell me what he looks like?" But the call ends without anything solid. He turns to me exasperatedly, "He has been standing around for thirty minutes, but you

> don't know what he looks like?!" Calling W28, the area's tactical vehicle to investigate and get a description: "Find out whether he is Whiskey Mike, Bravo Mike, Charlie Mike, or...eh..." He grasps for the fourth racial possibility, "...India Mike."

Although Sibu was diplomatic in providing all four possible racial categories, it is "Bravo Mike," the abbreviation for "black male," that occupies the most discursive space. Boom-gate guards are instructed to see black maleness as essential markers of suspicion, or as one guarding manager put it, "more than one Bravo Mike in a car without a sticker [indicating their status as 4C clients] is a suspect." This connection of "Bravo Mikes" to criminality is not special to 4C, but seems generalized across South African private security. Tessa Diphoorn (2015), an ethnographer of armed response officers in Durban, notes how the officers she observed systematically treated "Bravo Mikes" as potential criminals, stopping and interrogating any black men they spotted in their company's areas.

But rather than a reproduction of a simpleminded racism gone institutional, which unequivocally connects black maleness to criminality, this method of racial seeing is steeped in a sort of sociological knowledge popular to W0 and 4C. Although white employees had the tendency of emphasizing the importance of individual responsibility, to any and all questions of my questions on the factors that caused people to commit crimes, all employees at 4C pivoted back to the racial structure of South African society. While Welcome's answers delved into the historico-political trends in Johannesburg and Eric's tended toward a curiously anthropological look at the composition of township life, all who I spoke to returned to how South Africa located black people in situations of poverty, violence, unemployment, and other crimogenic situations. As Ryan summarized for me in a manner half apologetic and half matter of fact, "the reality of crime in South Africa is two or more than one Bravo Mikes in the car." Termed by Achille Mbembe (2014) in his lecture on race and futurity as a "scopic regime of visuality" where "the surface" of the body "becomes a social imaginary," race in this arrangement becomes not a simple signifier of a body's trustworthiness (although this can be perhaps inferred later), but a visual register through which observers can ascertain a body's likely modalities within the fabric of society.

Although the racial impact is somewhat unchanged, the connection between black maleness and criminality is less an indication of individual racism than of people producing understanding they believe necessary to navigate a racist society. Not coincidentally, this

practical sociological knowledge becomes especially useful in the environment of W0. Unlike the armed response officers in Diphoorn's account, the cognitive noise of the assemblage in W0 makes certain that the controllers have neither the time nor attention to spare on dispatching tactical vehicles to investigate every single black male that appears on the streams. The (over)abundance of streams and the patterns of South African domesticity in suburbs make certain that many dozens of "Bravo Mikes" appear on a daily basis, the overwhelming majority of which are employed as gardeners and laborers in the suburbs. In order to sort these acceptable ways of being black and male in the suburbs from potentially criminal ways of being black and male, the controllers have to develop a tight attention to the visual cues that remain in the splintered and low resolution Johannesburg they have to read.

> Outside of the Alfred house, there are two figures standing across the street in the middle of the road. I decide to try my favorite question with Donald again. "What makes something suspicious? Like these two guys why aren't they suspicious?" He looks down my index finger. "Ah, they are working. I can see they are using some machine." I honestly can't see anything besides the blue fuzzy figures and possibly the outline of a blue trashcan. "They are gardeners," he concludes with confidence.

The way a body is clothed (blue overalls or not), its relation to other objects of domestic labor, and the manner in which a body moves through the suburbs (within a pattern of labor or outside) becomes essential signs for the controllers. The men's blue overalls, a trashcan, and a minuscule hedge trimmer, which the stream quality hid from my eye were enough for Donald bereft of anything resembling a clear view of the men, to triangulate their modalities as a gardeners. Gates opening promptly to let a body enter are also easy clues to read, as they typically indicate that there is a gate remote unseen or someone inside has been expecting their arrival/departure. So-called "loitering" or standing idly around gates and walls is a sign of potential criminality as most robberies, hijackings, and home invasions, according to 4C, begin at the home security's weakest moment when clients return and open their own gates. Well-versed in the structure of labor and domesticity in the suburbs, the controllers are well-seasoned sociologists of the suburbs and their relationship to black bodies of all modalities. When confronted with amateur observers who seem to be adopting an uncomplicated racism, they get derisive and even hostile. One client phoned W0 at the beginning of Tuesday's evening rush hour; Benjamin picked up and she was calling to report a group of black men standing near her gate. W0 promptly dispatched a reactions vehicle to investigate, which reported back quickly that the group of men was waiting

for transportation. Unsatisfied with this explanation, the client continue to repeat her discomfort with the men remaining there, implying that Benjamin should have the reactions officer chase the men away. Hanging up, Benjamin muttered angrily, "This stupid lady, they are just waiting for a taxi. They are not coming to rob you."

In these moments, the controllers become students of what Sarah Nuttall (2009) calls "the surface" and "the underneath." Identified as Johannesburg's special variation on the African city's relationship with the visible/invisible, Nuttall, whom Mbembe (2014) is following in his formulation of "scopic regimes of visuality," theorizes how "[i]n Johannesburg, it is rather, or at least in a related but unique vein, the intertwining of surface and depth – in its historical and psychic senses – that defines the life of the city. Surface and depth exist in a set of relations in which each relies on the existence of the other, in which they are entwined or enfolded, suggestive of the other, interpenetrating, and separating out at different points" (83). In their close reading of the surfaces of bodies for their gender, race, and position inside or out of the domestic structure of labor in the suburbs, the controllers are able to reassemble a certain and clear view of Johannesburg that the technologies of the assemblage have shattered. While Nuttall in her work on "the surface" and "the underneath" makes a meta-argument for the value and effectiveness for revealing the definition of the post-apartheid city of these "surface readings" in literary and cultural methodologies, the observers of W0 instantiate a counter-argument. Derisive of pure surface readers like their uncomfortable and pushy client, the controllers make clear that they actually need independent sociological knowledge of "the underneath," of the racio-gendered organization of labor and motion in the city to do their jobs. This methodological attachment to "the underneath" is perhaps the ultimate consequence of how much the surfaces of the streams continue to scramble and befuddle the eyes of the controllers (and visiting ethnographers) in their attempted surface readings of bodies:

> It is hot. Welcome is inputting the new contracts into the system, as we both listen to Donald on the phone with a client. [...] Welcome types away. I was just falling off into a daze, he exclaims, "Ey!" Pointing at one of the middle screens, he mutters urgently, "These guys are wearing balaclavas!" On the stream over an office parking lot gate are two guys one in a red sweater and the other a bluish white, possibly striped, button down shirt standing just close to the gate. The quality of the video is so poor and their faces are so dark that it is difficult to see if there are wearing balaclavas or not. Most of their features are washed out in the midday sun. The stream is only able to pick up their faces and torsos; their hands are out of view. The next few seconds are

tense. Both of us search their faces wildly to see if the stream will show something more of their faces to convince us one way or another if they are or aren't wearing masks. Then in the next moment, the gate opens and they walk slowly into the parking lot. Welcome relaxes and lays back into his chair. Scratching his chiskop, he murmurs, "Ah, I think they are workers."

In the surface of the stream, the surface of the body becomes unreadable, even doubled into possibilities (masked/unmasked, armed/unarmed, laborer/criminal, visible/invisible) and methods of 'seeing securely' can only fall back on practical knowledge of the city's "underneath."

Cracks in the Surface and the Underneath: cars, disguise, and camouflage

Except in those rare cases where clients have requested off-site monitoring inside their garages and property walls, white bodies do not often appear on the streams mostly because, as I will discuss in the next chapter, white people do not walk much in the suburbs. There is the stray jogger, kitted typically in short shorts and short-brimmed caps, but most white bodies navigate the suburbs via car, which creates a number of issues for 4C controllers. While the vast majority of major criminal organizations operating hijacking and home invasion outfits in the suburbs, according to Connor and Mandla, using private vehicles (i.e. non-service vehicles) to escape from the reactions officers and their tactical bakkies, the majority of private cars that filter through the suburbs are driven by clients. Because of the usual speed of these vehicles and the limited frame of the streams, the controllers are only able to catch one at the most two seconds of a car moving through their area. Reflective windscreens and downward tilting camera angles make sure that there is little information available about the driver or passengers inside. Bereft of the surface of the body, the controllers are left with only the surface of the car, which contains little and less avenues for scopic readings than the body.

Figure 7: W0's bulletin board assists the controllers' memory of suspect vehicles recently. The printouts include photos pulled from boom gate cameras and provide descriptions of the suspected organization involved, their tactics, and timings.

Instead, controllers who each have encyclopedic knowledge of automobiles look for a car's make, model, color, and registration number and

compare it to the description of vehicles "known" to have used in recent hijackings, home invasions, and robberies. If they spot a matching vehicle, protocol requires that the controllers send the area's tactical vehicle out to investigate. These vehicle descriptions are common across the industry and are widely disseminated on 4C sister company's share frequency and shared private Whatsapp groups between police and private security like the one below:

> B: Robbery: Quail Road, Fourways
> Lookout, Grey Metallic Toyota
> sedan SCT406GP to get away car. Grey metallic Toyota sedan drivers window is smashed. 2 B/M occupants (8:44)

Criminal organizations and their vehicles have become so connected in the minds of the controllers and the employees of 4C more generally that they are known simply by their cars' description like the "Elantra Crew" or the "White Forest Subaru Gang." But as these descriptions require a crime to have already be committed, these lookouts are reactive rather than proactive and criminal organizations, according to the controllers, have gotten extremely adept at avoiding and tricking the electronic and biological observers who work to match them. When I first arrived at W0, their bulletin board of suspect vehicles was papered with BMWs, Mercedes, Audis, and one white Range Rover. As Welcome explained to me, high-end luxury cars were increasingly popular choices for the criminal organizations as the cars' power and speed assisted getaways and their luxury blended into the aesthetics of the suburbs. Rolling up to a boom gate in a R1 million BMW X5 is a easy way convincing on-site guards and whoever else might be watching that despite being black men the drivers and passengers are, as Welcome put it, "mini-stars or CEOs" and not criminals. "No *skorokoros* for these guys," he translated, "no fucked up vehicles." Referring to the criminal organization, the company has taken to calling "the Rolex gang" who had taken to using a black X5, "These guys dress very well, they look smart, but at the end of the day they are there to rob you."

In late July and August, however, the bulletin board filled with less ostentatious vehicles. What the controllers and managers theorized was that "the Rolex gang" had discarded their X5 in favor of a white Toyota Corolla. The tactic of changing of vehicles is not uncommon; the managers and controllers often expect criminal outfits to change their registration plates and preferred vehicles on a monthly basis. But the adoption of the Toyota Corolla was a marked difference from what the group had used before – a white BMW 5-series, a white VW Polo GTI,

and of course the black X5. Andrew handed me the printout for their last home invasion. “It looks like an Uber vehicle,” I commented. “Exactly!” Andrew murmured. But even with the directors wary of this resemblance, the disguise had been extremely successful in early weeks of August. “The Rolex gang” and their white Corolla, the controllers informed me, had been connected to at least six house breakings across the northern suburbs, including three within 4C areas. A photo of one of the incidences – showing the white Corolla pulling through a company boom gate as a 4C guard waved – circulated through the company Whatsapp group with the caption: “4C guard bravely waves at suspects!” But even the savvy controllers themselves fell victim to the mirage of the white Corolla, sending a reactions vehicle to chase after multiple “Bravo Mikes” driving white Corollas only to discover after questionings that the men were actual Uber drivers. Although the Uber disguise was a creatively new disguise, criminal organizations, I was told, have long been using police officers uniforms or driving white bakkies, resembling Telkom or Eskom trucks, to throw private security off the scent. But the incident around the white Corolla is perhaps particularly telling in its ability to encapsulate how the controller’s practical sociological ways of seeing and knowing is continually disrupted by the (slow) death of the apartheid city. While the present of a black elite in the suburbs was once an effective backdrop for the camouflage of black “mini-stars” and “CEOs” in luxury cars, an Uber vehicle works just as well these days. Although still a profoundly segregated city, those leakages or what Achille Mbembe (2014) “disjunctive inclusions” of black people in historically white domains are fracturing the racial city and changing the controllers’ sociological understandings (387). Faced with these inventive tactics of disguise and camouflage, the controllers are forced to constantly update their notions of what are acceptable forms of blackness in the suburbs look like to identify potentially criminal organizations and avoiding wasting time and attention chasing ghosts. In these moments of catching up, their sociological conception of “the underneath” of Johannesburg is shattering almost as profoundly as that Johannesburg they see in the streams.

Figure 8: A 4C smart boom over Ridgeway Ave in Morningside Manor

New Technologies, Familiar Dilemmas

Interestingly, as W0's ability to know "the underneath" of the city fractures, 4C is attempting to enhance their technological ways of seeing the body within the vehicle. Conscious of the ineffectiveness of street-facing cameras and boom gate guards in spotting criminality, the company, like many others, has adopted "smart booms," swinging arms beset with cameras on posts to capture the car and passenger at every angle. Legally prevented from restricting access to the road, the "smart boom" not as a barrier, but slowing mechanism allowing the cameras enough time to capture a vehicle's make, model, and registration number. In order to raise the swinging arm, drivers must press a green button, which forces drivers to pause and lower their window allowing a camera trained on the driver's window to penetrate the glass of the car and gain a view of the body. Alongside these "smart booms," in November Eric was in the midst of beta-testing of analytics that record and cross-reference registration plates against suspect cars, automating the work of the controllers. But just as these the company attempts to increase its vision of the suburbs, new methods of disguise proliferate. Andrew explained one morning showing me a picture of another "Rolex gang" robbery how criminals have learned by opening their car doors instead of rolling down window they can hide their faces from "smart booms"

with the glare of their window. The controllers have been instructed to watch for this behavior. But listening to the cacophony of W0, I wondered if it was even possible for the controllers, expert and seasoned observers as they are, to catch such a small movement on one of the many streams.

Despite the best efforts of the directors and controllers, the assemblage's noisy struggle with cameras and analytics, function and dysfunction, light and darkness, surface and deep readings, certainty and disguise make certain that its proliferation of technologies and techniques of vision cannot be seen as victories for the visible at the expense of criminality. Rather, as participant in an African city "that reveals itself" and "bathes itself in shadow," the assemblage makes clear how observing life in Johannesburg constantly re-invites epistemological questions back into the everyday. In the sight of W0, what is seen and what is not, what is framed and what lies beyond, what is known and what is not become technical and methodological problems in constant flux. To 'see securely' is to contend fiercely with these problems and to heuristically reconfigure one's own way of seeing as a perpetual attempt to push the unseen and the uncertain back into the visible and the intelligible.

Figure 9: On the deck outside, Mandla clutches a handful of "hollow-points," bullets designed to explode inside the body on impact.

RHYTHMS OF SECURITY: sjamboks, bullets, sleep, and speed

"Two bullets came through his femur," Andrew slaps his thigh. "Breaking the bone in two places." Thulani winces. "And once through the foot." The incident had started with a routine alarm activation late the previous evening. When the control room dispatched Isaac and his fellow reactions officer in their tactical bakkie to the residence, it was just another reaction of the half dozen that each officer receives in the course of their shift. More often than not, these activations are false alarms caused by a mispressed panic button, an accidentally triggered sensor, or faulty wiring. And before the officers reach the gate, W0 calls off the armed response. But the night before there had been no call and when Isaac and his fellow officer lifted the garage door it became clear why.

Andrew was on his way to the hospital, but took a minute to relate "the incident" while he stood in the door of W0. Earlier that night, two men, armed with a single handgun between them, slipped inside the gate of the residence and under the garage door as the clients, a married couple, drove in for the night. Despite being held at gunpoint in the garage, "the client" somehow managed to wrestle the weapon away and then went about "pistol-whipping the guy to a bloody pulp." Having incapacitated one man, "the client gave this gun to his wife and ran out

after the second guy," after which "the wife" closed the garage door behind him. But when a few minutes later, the reactions officers lifted the door as part of their response the wife began shooting, catching Isaac in the upper leg and – Andrew pinged the trajectory off his palm with an index finger – through the flat of his foot as he fell backwards. "When Connor arrived, there was blood everywhere," Andrew shook his head referring to the would-be home invader, "the client had beat him nearly to death." "And Isaac?" Thulani worried. "I am going to see him now, they are waiting for the swelling to go down before they can put a steel plate in his femur."

Although unusual because of the clients' bloody recklessness, similar stories of injury and death circulate throughout 4C. Some are the typical fare of Joburg 'crime talk' – the fatal details of a widely-reported death of a SAPS officer on the Golden Highway or of a hijacking that left a suburban man with three bullets in his stomach and his hijackers with a BMW unsalable with bloodstains – but others originate closer to home.

> Mandla came into reception and quietly confided to Emily. Peter from Y6 had died. "How?" she whispered. Switching into Zulu for the details, he twisted his index and thumb into a pistol and laid it at her chest. With Mandla heading out the door to begin his day on the road, Emily turned to me with a sad look. "This job is very dangerous, especially for those guys. I have been to four funerals since March. It makes me miss my home. In Zim, it is not like this; it is poor, but safe." Later when I hopped in the car with a frantically busy Blessing, I asked him about Peter's death. He corrected me, "No, it was not a shooting, he was sick."

Even with uncertainty cloaking the details of each death for some, dark news spreads quickly through the company where funerals have become touchstones in the passage of time. Inquiring into how Sello, Senzo, Thabang, or an unnamed guard had died turned up an almost universal answer: "He was sick." The specific type of illness is left unspecified to young white American ethnographers; but one thing is clear, the life of a private security guard or officer, it seems, is bad for your health.

Although these silences certainly can be read for insights into the social terrain the HIV/AIDS epidemic in South Africa, they are also pregnant with a more local truth. As Mandla's pantomimed gun and Emily's worry over his well-being enact, stories of un-health inside 4C do not remain discrete, but become discursively connected to the day-to-day work of private security, even if the cause of death is in actuality unconnected. These discursive elisions betray how employees understand how they and their bodies function within the design of the

security assemblage at large. Where the previous chapter examined the 4C assemblage's visual capacities (and incapacities), this chapter shifts away from its "eyes" (human and electronic) towards its bodies – the reactions officers like Isaac, tactical officers like Mandla, and guards whose physical presences help in securing the company's areas. Using the local knowledge inside 4C about the relationship between un-health and the everyday of security work as its point of entry, this chapter takes seriously Jane Bennett's inclusion of humans in her definition of *an assemblage* and considers how human bodies become integrated into the design of the 4C security assemblage. Most basically, it finds that this integration comes through the enforcement of rhythms, patterns of bodily motion and inertia across the space of the city. Deploying Henri Lefebvre's (2004) conceptualization of *rhythms* as a repetitive "interaction between a place, a time and an expenditure of energy," (15) it delves ethnographically into the shape of these rhythms, how they are cultivated and enforced through technologies and techniques of surveillance and discipline, and the ways which they become in spurts symbiotic and discordant or to use Lefebvre's words "*eurhythmic"* and "*arrhythmic*" with the bodies of 4C employees and the patterns of the life of the city.[†] In doing so, I attempt to illustrate – in an inversion of new materialist debates on the agency of objects and humans – how far from being a happy or invigorating integration of the technological and the biological, these rhythms of the assemblage gravitate towards the rough operationalization of bodies, engendering situations of where bodies are caught in conditions of negative agency, in turn doling out and suffering everyday exhaustion and violence.

The people and problems of guarding

Compared to ADT, G4S, or Chubb Security, 4C is as Andrew puts it "small fry." Operating only in a handful of suburban neighborhoods around Sandton, a few gated communities in Midrand, and half a dozen buildings in the Johannesburg CBD, the company does not even register a fraction of the size of these multi-nationals. But even so, the company's official roster of employees stretches over a dozen pages, filled with over a thousand names, with two-thirds of which are listed as guards. Manning boom gates, patrolling outside "spotter" guardhouses, monitoring the goings on from the gatehouses of residential complexes, protecting

[†] As Stuart Elden (Lefebvre 2004) points out, Lefebvre intended his method of *rhythmanalysis* to be applied in topics as disparate as "music, the commodity, measurement, the media, political discipline and the city" (vii). In comparison, my own use of the method is very limited, focusing on the human body in its repetitious and energetic interactions with the everyday time and space of the city.

industrial waste sites, or checking visitors at entrances of gated communities, 4C guards, dressed in eye-catching blaze orange polo shirts and windbreaker jackets emblazoned with the company name, not only make up the majority of the company's employees, but provide the most visible marker of the company's securing presence in its neighborhoods and its most consistent point of contact with clients and "the general public." Despite these important roles, guards are not well regarded within the middle and upper management of the company. For Andrew, the guards are the company's biggest waste of money.

> "Why don't I like street guards?" He pulls out his phone and flips through to a photo Thulani had laughingly shown me earlier. "*This* is why I don't like street guards," Andrew emphasiszed. It was a photo of a guard who was stretched out in sleep across a careful bed of newspaper inside a guardhouse. Thulani smiled again glancing over. Andrew continues, "You got people who have a job they don't believe in – with minimal pay. They don't give a shit. You should speak with James [the guarding director], he will tell you we have dismissed thirty percent of our guarding – something like thirty percent. The truth about security is that it will be less human intensive in the future, and more technology intensive. You have a person that is unionized, sleeps, can be bribed, and costs you per month while a camera is a one-time installation and cost."

Although making a move towards guard-less, more technology-intensive security is still up for debate amongst the directors, Andrew is hardly alone in his distrust of guards. Guards are so much of a "problem," for all the reasons he listed that there is an entire wing of the company, the guarding office, whose sole task is to manage and supervise the company's guards.

Each weekday, the challenge of this task turns the hallways and lobby of 4C office into a hive of activity. Guarding supervisors weave in and out of the steel security doors, black men of all ages clutch their qualification documents as they wait for interviews or scribble in groups of twenty or thirty on the company's homemade aptitude tests. Currently employed guards trickle in and out of the guarding director's sunny desk-laden office to attend disciplinary hearings as witnesses against other guards or more commonly to answer for their own "fuck-ups." In those weekday mornings when he isn't sleeping off a long nightshift, junior guarding supervisor Blessing Mothobi is usually rushing amongst the hubbub, running through lists of absentee guards, reviewing hearings summons, dialing up "big" clients, and "talking nonsense" with the controllers and the other guarding supervisors. At twenty-six, Blessing is the youngest guarding supervisor and one of the youngest 4C employees working out of the office. Equipped with a round faced and a beaming smile, Blessing has a buoyant bravado about him, blending jokes

with barked orders on his paths through the halls. But not everyone is entertained by his boyish look and jovial attitude; Connor proclaimed loudly his annoyance more than once by commenting (accurately if unkindly): "This boy he is always talking." Happy to have a willing audience "on-the-road," Blessing and I became consistent companions, spending long days traveling around Johannesburg in the guarding wing's Nissan Livina. Bundled inside through the winter and sweating in November heat waves, we traversed the city from Midrand to Joburg CBD, townhouse complex in Melrose to boom gates in Bryanston. The long days often had both of us wiping sleepiness out of our eyes and skipping lunch, every hour grinding through to the endless task of "disciplining the guards."

Arrhythmia of the shift: sleep, boredom, and surveillance

Caught between the company's dependence on guards and its distrust in them as transient and unreliable employees, the guarding wing has equipped itself with a slew of techniques and technologies to ensure that guards are present and carrying out their duties in a manner most advantageous to the company. Most basic amongst these is the 2/2/2 shift schedule. Unlike W0's controllers who work on a 3/4/3 shift, 4C guards with a few exceptions work on a rolling schedule: two twelve hour day shifts, two twelve hour night shifts, and finally two days off. As Ryan, Eric, and Sibu informed me, this twelve-hour shift pattern is an industry standard, as it allows companies to maintain guards at all their sites for twenty-four hours without dealing with monetary, logistical, and manpower costs of using a normal eight-hour shift.

Wary of absenteeism, the guarding wing makes careful use of the day-to-day objects of guarding to ensure guards keep within this rhythm of the shift. Armed with little more than handcuffs, guards' basic tool of the trade is their site's handheld iCom two-way radio. Issued as a means to report criminal activity to W0, each guard must use the iComs to radio into W0 to mark themselves present at their site each morning. The lists that are compiled as a result go straight to the payroll department who uses them to allocate guards' paychecks. As a result, the frequent problem of broken, malfunctioning, or lost radios and radio chargers spark a great deal of anxiety amongst guards, as a non-functioning radio is potential money-losing headache. Alongside the radios, each site is outfitted with an occurrence book or "OB" in which all activity on site is supposed to be recorded. Required to sign the OB at the beginning of each shift, guards must also make hourly reports on the status of their site. A twelve-hour night shift can have the guards' signatures and company numbers next to the same words over and over: "Nothing to report; all

in order." Although at first glance useless busy work, similar to the radio the OB functions to tether the guard to their site.

Advantageous to the company, the rhythm of the shift for the guards is a numbing rollercoaster of idleness and exhaustion. Disconnecting them from the balance of the standard five-day week, its constant alternation between night and day creates a situation where one's natural circadian cycle is continuously disrupted. A guard working for another company in Johannesburg described the physical and mental effects of this jarring schedule to me. "When I knock off sometimes I have a headache. I must get some Dispirin or Panadol to sleep nice. And then when I get home, I just eat something and go to sleep. This job is not nice, there are no good nights." Although each shift is exhausting enough, it is common for some guards, particularly those looking to be promoted to office or reactions positions, to work "double shift" or twenty-four hours of continuous duty. But the cumulative level of exhaustion accrued is immense, if routine.

> Blessing and I get back to the control room around 18h30. It has been a long day of driving and site visits. Tonight's night shift is Zanele, Benjamin, and Sibu, and the three of them laugh at my tired face. "I've been here since 8 in the morning," I tell them, "I don't know how you do your twelve-hour shifts." They laugh at me and assure me that I would get used to it. "Today, Thulani did twenty four hours, and you are just on ten," Sibu chides.

In comparison to guards, the controllers of W0 are lucky that their twenty four hour shifts, , although boring in stretches, usually contains flurries of activity. The average gate or street guard does not have that luxury – a twenty-four hour shift is more often a day of unbroken idleness.

Figure 10: A Bloodhound Rover, a GPS-based guard tracking device

Colliding forced inertia and exhaustion, the rhythm of the shift is one which actively fights the rhythms of the body itself and as such can easily slip out of sync. Preventing guards from sleeping on duty is unsurprisingly one of the guarding departments fiercest crusades. Wary that the checks provided by iCom roll calls and OB status reports can be easily circumvented or faked, the department is increasingly issuing guards, particularly those with patrolling duties, digital tracking devices like the Bloodhound Rover and the Sefeko Guard Patrol. While the Bloodhound uses

GPS to record a guard's location in real time, Sefeko devices operate off of 'touch points.' Installed into the built environment of the site itself, these small watch battery-looking RFID tags must be touched to the guard's receiver in a specific order. Programmed to beep loudly at prescribed patrol times, the receiver records the time of each contact and transmits the results to the guarding department and the site's clients in a full report, detailing that guard's total ordered patrols, percentage of "successful" patrols, failed patrols and the corresponding reasons for failure (late starts, missed tags, tags out of order, too much time between contacts). Akin to a sort of electronic puppetry, these trackers force guards not only to periodically move out of their guardhouse or gatehouse (where they may or may not be sleeping), but also to move with prescribed speed and regularity to avoid being called up for disciplinary hearings.

Figure 11: The interior of a guardhouse in a townhouse complex in Waverly

These technologies of telematic surveillance are assisted by technologies of visual surveillance built into the architecture of the guardhouse itself. Most other guardhouses, like the one pictured below in Melrose, are built with large outside-facing windows. Although often serving to light what can be dark and claustrophobic spaces, these outside windows also allow any townhouse resident arriving home or passing guarding supervisor to spot a sleeping or guard from a distance. Many permanent guardhouses and gatehouses have their own internal CCTV cameras, angled to survey the narrow interior of the room and the guard within and provide a real-time feed to clients and the guarding wing.

But even with access to over a dozens of internal guardhouse cameras, only one appears on the streams in W0; Sefeko patrol reports, Samuel one of the guarding directors confided, are only checked once a week and Bloodhound even less as the units have the tendency to break, or

as Samuel claims, be broken by defiant guards. Radio roll calls can be circumvented and OB status visits can be faked. Unable to put a supervisor in every guardhouse window, the guarding department hopes these techno-architectural monitoring systems work panoptically to disciplinarily bind guards to the rhythms of the shift. In some situations, it has the desired effect, even multiplying a guard's perception of being surveilled even when they are not. On a visit to an office complex in Linksfield, the three guards on duty informed me confidently that an camera affixed to their gatehouse not only relayed video, but audio to W0 as well. Never having heard audio relayed inside the control room, I checked with Welcome about this audio feed from Linksfield: there was nothing of the sort.

From Discipline to Punish

But these instances of phantom surveillance are rare, and a number of guards continue to sleep on duty. For the most part, the guarding wing's technologies of surveillance work less proactively than reactively, providing indisputable evidence of absenteeism or sleeping on duty only after a guarding supervisor has discovered or suspected that the rhythm of the shift has been broken.

> As we pull up into the driveway outside of 17C complex, John and Blessing quickly spot through the window that the guard is sleeping – the brim of his hat pulled down over his eyes and head tipped backwards. Whispering quickly, John and Blessing simultaneously try to have me to snap the incriminating photos with my iPhone. I stall until a moment later the guard pops his head up and comes out with the OB, looking sheepish.

Although the guardhouse he had been sleeping in was outfitted with a large outside window and a functioning inside camera, in the end it is only guarding supervisors like Blessing and John and their punitive techniques who can force the guard back into the rhythm of the shift.

Uninvolved with keeping up with any of the department's panoptic technologies, Blessing's work is "on the road" and dominated by informal interactions with guards, described explicitly and regularly through the language of discipline. At the beginning of our first day together "on the road," he turned to me in one of his characteristic preambles to the day: "Today I am going to show you how you discipline your guards." These days of "discipline" revolve around the "AWOL list." Running on a typical day anywhere from three to thirty names of guards who have "absconded," the "AWOL" list presents any opportunity for Blessing and the

guarding office to punish those guards who have broken the rhythm of the shift through absenteeism.

> The next stop is a gated road closure outside a temple in Norwood. As we roll through the gate Blessing leans out the window and points out that the guard has unpolished shoes. Parking, he consults the code of conduct looking through to find the right infraction. Finding it, he turns to interrogate the guard who is now standing outside the car window about his reasons for 'absconding'. The guy doesn't bother saying anything and simply stays quiet. Disgruntled, Blessing turns to the infraction list and cites the guard for Numbers 3 and 48 – incorrect wearing of the uniform and absentee without leave. Ripping the guarding department's carbon copy off, he hands the citation to the guard and informs him he must appear at the office on the prescribed date. As we drive away, I ask Blessing if the guy was able to provide any response for his absence. He shakes his head, "All he said was 'ah eish, ah eish'; -- and scratch his balls!" Slowing to plow over a speed hump, he launches into a lecture about how this was the proper way to deal with guards. He adds grinning, "I like to sjambok you see," but switches in a more conciliatory tone, "If I don't discipline my guards my bosses will be fighting with me!"

Although easily imagined, guards often keep their reasons for absence unsaid. Without a valid doctor's note for sickness or birth or death certificates demonstrating legitimate family obligations and pre-clearance from the guarding office, guards have little recourse to avoid a citation. It is more prudent to be silent. But even with this silence, discipline becomes overtly punitive. One day of absenteeism, although a serious violation in the eyes of the guarding department, is not by itself grounds for termination, but absenteeism and another citation like a uniform infraction puts guards only one more citation from being fired.

The looming threat of job loss is not the only 'sjambok' at Blessing's disposal to force guards back into the rhythm of the shift. A native sePedi speaker, Blessing plays preemptive language games to underscore his power over "his guards."

> Next stop is "disciplining" a new guard at a walled-in townhouse in Melrose. [...] The guard was watching something on a small gray television set on the desk in the small foreroom, which is connected to an even smaller bathroom. Blessing quickly and authoritatively flips the TV off and begins instructing in a loud authoritative voice. "If you see anything suspicious, press the panic. We pay those guys in the vehicles for this. Everyone who visits must sign the register." He checks the phone, the radio, and the intercom to see if they are working. [...] Finding that the guard's handcuffs and pepper spray were laying neatly on the desk, Blessing instructs him to keep

> it on his belt at all times. We sit in the car as he sends out an email to his boss detailing the visit. I noticed that throughout the interaction the guy seemed to have difficulty understanding what Blessing is saying half the time. I ask him in the car later what that was about. Blessing smiles and tells me he was speaking Pedi and the guy was a Zulu-speaker. He comments, "These Zulu guys they are stubborn, they must learn."

These lessons in sePedi are less a magnanimous way of getting isiZulu-speaking guards familiar with his home language and more a method to educate them in their position in their relationship. By throwing them into conversation in a language they understand but strain to follow, his control over the terms and tenor of the relationship is established, underscoring his willingness to exert his power over them no matter how petty.

Only twenty-six and in charge of men much older, Blessing is sometimes faced with guards unimpressed with these techniques or as he puts it "having no respect." But he is quick to innovate new, less confrontational modes to inscribe his power as a supervisor. Commonly interrogating in sePedi and then translating to me in English a summary of a guard's transgressions, Blessing would take advantage of a guard's common misapprehension that I as a white person was connected to the management of the company. Turning to me, he would often ask, "He is saying that he was here, but I am asking him where is the proof? How can I believe him when there is no proof?" Never intending me to answer his rhetorical questions, Blessing was the clever puppeter in this racial theater. Masquerading as powerless not to discipline the guard under the surveillance of my whiteness and in control of the terms of the translation, he was able to punish without risking a potentially losing face in an open confrontation.

Although each of these techniques of discipline are useful in their own places and times, none of them are as effective or versatile as the Nissan Livina, the company car he and I would use on his site visits. Facilitating his frenetic travels across the arc of the northern suburbs, the Livina and his preternaturally sharp eyes are also useful in spotting sleeping guards through the windows of gate houses. Plowing over speed humps in Birdhaven and Melrose, I got used to the Livina slamming me out of the stupor inevitable on long shifts with Blessing and then reversing backwards several blocks to allow Blessing to scrutinize an unusually motionless guard in a blaze orange coat. The mobility the Livina affords is not just a necessity for his daily travels, but also enhances his status as he moves through the car-obsessed terrain of Johannesburg. In his book *City of Extremes* (2011), Martin Murray points out that automobility in Johannesburg is a

marker of one's place in the changing racial and class order of the post-apartheid city. He writes: "Johannesburg has long maintained a well-deserved reputation for privileging automobiles over pedestrians, and for pioneering sequestered zones of safety in a disorderly, sometimes dangerous, urban public realm. Only the poor walk anywhere, and to do so they must travel long distances and negotiate a forbidding urban landscape seemingly oblivious to their peripatetic flight" (213). In this environment where mostly white and/or well-off people can afford private vehicles and everyone else walks or rides mass transit, having daily command over the Livina locates Blessing differently in the racial-spatial order of the city:

> Next stop in the middle of an long and exhausting afternoon is Saxonwold to deliver new protocols for signature by some "spotter" guards. As we roll up, we come up to one of the guards who is patrolling down the street from the guardhouse. Blessing greets him with his hand hanging out window and then he pulls away. The guard jogs alongside the window. I ask him what he told the guard. "I told him I can't give him a ride cause if the clients see him they will see it as him not doing his patrols."

In this environment, by refusing someone the privilege of riding in a car even for a short distance, Blessing is not in deference to a nebulous sense of client's eyes , but in actuality offering a reminder that as a driver he occupies the city with more mobility and status than a guard. As such the Livina often served as his seat of authority, more a technology of humiliation than of surveillant power. Pulling up to gatehouses, he would often blare the horn to alert guards of his arrival, forcing them to come to him at the driver's window of the car – his arm dangling relaxedly out the window and the guard standing at nervous attention. In these moments fighting the natural rhythms of the body, the rhythm of the shift finds eurhythmic synergy with the racial structure of the city itself. Implicitly opposed to walkers and the taxi, the Livinia becomes paradigmatic of the racial city's own humiliatory and punitive disciplines, its macro-distribution of speed and comfort, forced slowness and exhaustion.

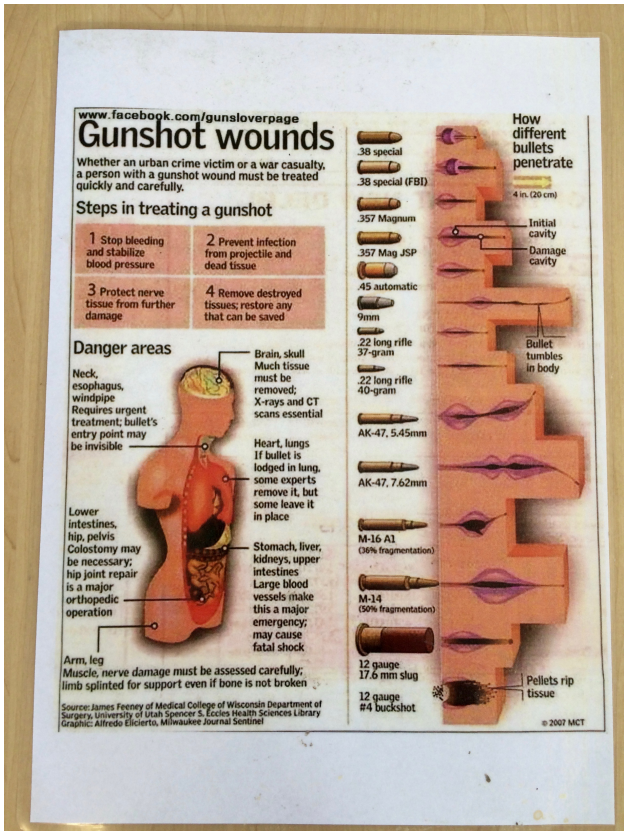

Figure 12: Training materials in W0 describe the effects of different bullets as they enter the human body.

Perpetual Motion and the Tactical Bakkie: broken rhythms, shattered bones

Despite its challenges, there are guards who survive and even thrive enough within the rhythm of the shift to be promoted into the ranks of the company's reactions officers. Reactions officers like Isaac spend their shifts behind the wheel of 4C's black "tactical" bakkies, strapped with steel-plated bulletproof vests and handguns. All black and coloured men in their mid-20s to early 40s, the reaction officers carry out the armed response for all alarm activations in their assigned area. Routinely entering and searching houses where a possible crime might be taking place and to operate the tactical bakkies often at high speeds, reactions officers are selected from the most capable and responsible guards. Marshall, Connor, and Mandla run trainings and the rare disciplinary hearings make sure the officers are keeping up the risk and responsibility their jobs require. But there is no supervisory equivalent to Blessing on the reactions side of the company. Partially attributable to their relative reliability, the mobility of reactions officers is also to blame for the lack of supervisors. Moving constantly through their areas, reactions officers have no guardhouses or boom gate to report to, making the sort of supervising that Blessing does impossible. But also, the speed, danger, and machismo woven into the texture of

their daily work lends the reactions officers much greater status and respect in the company than guards, discouraging the confrontational and aggressive style of management that supervisors hand out to guards. And so in lieu of supervisors, the company has modified their tactical bakkies with an array of devices that ensure the officers are keeping up protocol:

> I got to the office around 6h00 following the promise that Marshall would be taking reactions officers out on physical training. Walking up the ramp, I find Ryan with his head stuck in one of the tactical bakkies. His laptop, an Ethernet cord, and DVR were tossed across the driver's seat of 4C's sister company's newest bakkie. The truck is pretty typical for private security vehicles: small cabin with two bucket seats, a large open back laden with a steel chest, car radio, and a portable police-style radio just below it for receiving and relaying messages to and from the control room. This particular vehicle and one of 4C's own tactical vehicles had just arrived from a body shop where it had been outfitted with new cameras: one inside surveying what was beyond the windshield, two outside on the top of the cabin angled forward and to either side, and one embedded inside the lefthand into the DVR which records each of the camera feeds and relays it to the company's servers. As he works on linking up to the correct IP address, the tracking port, a small circle of indented chrome rimmed with red light, beeps incessantly. Ryan explained as he clacked through the network software. The beeping was due to the car idling. It was a way of reminding the officers to either keep moving or to turn the vehicle completely off per protocol. If he had not been plugged into the DVR, the beeping would have become incredibly loud after a few minutes in order to wake up any officer who may be sleeping on the job. During the winter, the feature is especially important, he notes, as officers who may want to sleep try to leave the car on for the heat. Additionally, the DVR relay gives the bakkie's location, speed, camera streams, door positions, and as well as whether the car radio is switched on, each useful for catching negligent drivers.

While the telematic, visual, and punitive techniques and technologies of the guarding wing uphold a rhythm of the shift defined by long stretches of inertia, the beeping, tracking, and visual surveillance built into the tactical bakkie gravitate towards motion, discouraging idling in its fight against dozing employees. Officers are supposed to maintain consistent movement through their areas. Part of 4C's strategy, these perpetually patrolling bakkies are intended to project a sense of 4C's vigilance and familiarize officers with their area, knowledgeable of each house, the routes, and sensitive to any small and potentially suspicious change in their area.

Figure 13: Trackmatic's map runs in real-time at W0

Although the new vehicles are being outfitted with the sophisticated DVRs, the Trackmatic system, installed via the chrome ports, is the tried and true method of enforcing this rhythm of perpetual motion. Displayed on a 15-inch computer screen placed at the reactions desk in W0, the Trackmatic software provides a map of the curving and crosshatched streets of the northern half of the greater Johannesburg area, populated with icons of each tactical bakkie. Represented by a round circle inset with a color-coded triangle, the map provides the bakkies' movement status, its speed, direction, driver's name, and moving time at a glance. Alongside ensuring that reactions officers remain in their prescribed areas, the Trackmatic software allows officer's reactions times, the minutes or even seconds between dispatch and arrival at a client's house, to be measured and scrutinized. A slow reaction time could result in a disciplinary hearing if officers are unable to account for the time. Trackmatic also tracks the bakkie's regular motion. If the driver exceeds the speed limit or idles too long, emails are sent to Marshall and the controllers of W0. Motion has become so associated with working in the reactions that "standing down" or a term which technically indicates a officer temporarily off-duty has come to be a shorthand for parking, whether or not the officer is set to be off-duty or not.

Although as Mandla puts it, there are some officers "who don't want to listen," and the wear and tear on the tactical bakkies testify to how effectively this rhythm of perpetual motion has been taken up. Rented from a company in the East Rand, the rhythm of the tactical bakkie turns brand new trucks into beaters in four years. One truck, which Mandla and I took to be returned, looked and ran like a vehicle five times its age. The transmissions shuddered through every shift, the driver's seat padding was torn apart from the constantly friction of officer's holstered handguns, and odometer registered some 180,000 km. Familiar with the overhead that comes with these vehicles, Andrew estimated that the tactical bakkies run about 200 km per shift,

costing “R20,000 per month in petrol alone.” He put it into context, “they drive to Cape Town every six days. Then they take a day off, and drive to Cape Town again.” Not only good strategy for their areas, constant motion is also a safety measure for protecting the officers themselves from potential ambushes.

> Another entry in yesterday’s Whatsapp entries noted that suspects had ambushed an ADT bakkie. Both officers it was noted were shot and killed. “This I am convinced will be the newest way of getting guns,” Andrew states of the attack as he walks through W0. He orders Donald who is working double shift at the reactions desk. “When the officers stand down you must push them to confirm that they are out of the vehicles.” The ADT guys had been ambushed by their assailants while stopped. This practice of sitting stopped inside a vehicle “is not tactically correct. How can you fight when you are in your seat and you've got the heaters on and the windows up cause it's winter and you don't know what the fuck is going on around you?” He finished emphatically again to Donald, “They must get out of the vehicle that they are standing down.”

Inertia then spells vulnerability for the reactions officer. And in response the momentum of the rhythm of perpetual motion transfers from vehicle to body of the officer itself. But even with this attention to detail, the rhythm of the tactical bakkie still can be broken, sometimes in explosive ways.

> We stop at the DPE boom gate to get the story about an accidental discharge of a firearm. The reactions officer on duty shows the bullet scrape in his bakkie. I snap some photos as the reactions officer theorizes to Connor and Mandla. Apparently there was another officer on duty the day of the discharge. The current reactions officer (I don’t catch his name) says that it had happened when the guys was handing over the vehicle and the weapon. He acts it out, pretending to rest an imaginary handgun on the driver’s seat, picking it up, and then clearing the chamber whereupon the gun went off. Both Connor and Mandla shake their heads, remarking on the poor protocol of placing a loaded firearm on the seat like that. Squatting down, Connor traces his finger along the dent of back right side panel, whizzing his finger off the side to trace the trajectory of the ricochet. Mandla notes that in the officer’s statement about the discharge there was no mention of damage to the vehicle. The next couple of minutes, we root around with the toes of our shoes in the dust and unearth the spent cartridge several meters away. Next thing is to try to figure out where the bullet went if anywhere. “I just don’t want it to have gone into somebody’s wall or car,” Connor states. But based on his amateur ballistics, it seems unlikely. We leave without finding the bullet. But the officers in question will be called to the office.

Damage to the tactical bakkie is not ideal. But in comparison to other accidental discharges, it is far preferable. Often it is the reactions officer himself who catches the ricochet. On one drive through Waverly in the days following Connor and Mandla's investigation, I asked Blessing, "These accidental discharges, are they very common?" He paused before replying, "Yah, you know Bongani? He used to work reactions and one day he shot himself in the leg. He is still walking with a limp." Much of the impetus behind installing interior cameras into the cabs of the newest tactical bakkies was in part to prevent these sorts of mishaps. Believing that the discharges are a result of breaking gun safety protocol, the interior camera was designed as a panoptic reminder to reactions officers to practice their training. Fraught with software bugs at the present, the DVRs are intended to allow any controller or director to view the reaction's officers in real-time and retrieve footage in case of an accidental discharge.

But even when the DVRs have been patched and tested, it is unlikely that any improvement in the bakkie will prevent all the injuries that the reactions officers suffer, precisely because the tactical bakkie's ultimate function is to bring officers into situations of potential harm and extreme danger. Charged with searching and clearing houses of armed suspects (and as we have seen armed clients) who usually outnumber them, reactions officers can find themselves dodging bullets. During his time as a reactions officer, Philip, the guarding supervisor, followed three suspects in his tactical bakkie into a shooting in a cul-de-sac in Alexandra. By the end of the shootout, one suspect was dead, two others arrested, and Philip, a former Alex resident, was forced to move out in fear of retribution. Eric, now the head of the technical department, was also involved in a shooting with suspects from the "Rolex gang." He killed one suspect, and walked away uninjured. On the first day at W0, Marshall related to me the story of a shooting he found himself in at the end of his time as a reactions officer.

> In 2012, he was responding to an alarm in the Waverly area of the northern suburbs on Burn Street at night. "My partner and I we arrived at the house with 2 minutes response time," he says proudly. Three guys, there was an armed robbery in progress. When we got out, they came out behind the bushes and started shooting." Three bullets went through his arm and shoulder. Others were stopped by the steel plate in his bulletproof vest. He pulls off a wide elastic band he wears over his right to reveal two round scars. Both protrude from the indents where the impact destroyed sections of his forearm muscles. On either sides of his arm, he points out there are long scars from where his shattered bones ripped through his skin following the impact of the bullets. He pulls back his shirtsleeve to show me the dented exit scar on the back of his shoulder. Since

> the incident, he has worked in the office which seems to suit him. He tells me how this is the importance of wearing your vest "with the plates." Without the steel plates, he would have died. After the shooting, "I was in the hospital for four weeks," while his partner, who was also shot, spent nearly 3 months.

When I visited him at his home in Alex with Blessing a month later, Isaac was still mostly bedridden. He showed us how he could still move his toes, despite the bullet wounds and the long cast. Intersecting with other cartographies of violence, the rhythm of perpetual motion by its own design breaks itself, lapsing into long hospital stays and shattered bones.

Sleep and Speed: bodies as technology

Rhino poaching, dogs, and the problems with the ANC are all popular topics of conversation for the white employees of 4C; black employees' conversations tend more around ongoing student strikes, management's tight fisted attitude, and the Soweto derby. But a shared love for cars, especially fast cars, can bring everyone together. Renting their building from a landlord with a side business pawning cars, 4C's parking lot is filled with BMWs, Mercs, and Porsches. On smoke breaks, Ryan, Mandla, and Welcome would share which in the lot they would choose for themselves. When Jonathan, "the big boss," drove his Mercedes AMG CLS63 V8 Biturbo into work one morning in September, everyone gathered around admiring. "That is 1.9 million of machine," James, one of directors of guarding, commented with uncharacteristic awe. Inspiring disbelief and admiration, fast cars bring out the poets in 4C's employees (and in myself).

> Bumping our way down the R25 (Mandla commented as he dropped over a pothole "Eish this car, it is not comfortable eh?"), a white Audi accelerates from behind us, evaporating from tip to tail in a moment. It whizzes by us and floats through the crack between an 18-wheeler and a taxi 15 meters ahead. Mandla exclaims "Yoh!" before turning to me smiling and saying, "See the beauty of having the fastest car! Anything is possible! The takeoff, ABS, the brakes you can stop at any moment!"

As one half of the tactical unit, 4C's crack team that responds to any and all crimes in the northern suburbs, Mandla has more than a passing interest in fast cars. The VW Polo TSI's speed is what makes the difference between a good day of action, chasing suspects, and a bad one of close misses. The free wheeling speed with which they move through the city gives the tactical team more than a touch of machismo. Hearing one of Connor's barked orders in W0 one

morning before Connor headed out on the road, Andrew joked: "Connor thinks that he is the only one that works around here; the rest of us just sit around."

As Andrew slyly points out, in the day-to-day at 4C speed can often become a metonym for work and usefulness, while being stationary can be associated with laziness. One of the favorite chides in W0 was to accuse someone of "scratching their balls," of absentminded slowness, willful and stupid idleness. Often applied to guards or sleeping or slow reactions officers, "ball scratchers" do not drive cars or shoot guns; they are imaginatively the lowliest at 4C – soon to be fired. Akin to character traits in the minds of the controllers at W0, this chapter has attempted to show that speed and idleness are embedded into the design of the assemblage itself. It is the rhythms of security, rather than the diligence or negligence, that organize the bodies of the employees of 4C into categories along the spectrum of motion, dividing those that move from those that don't, those that sleep and those that speed.

Much of the scholarship on new materialism that has informed my concept of the assemblage is concerned with pluralizing agency beyond the figure of the human, 'provincializing it' in order to open up the possibility that things enter into the academic narrative as equally agentic to human beings. But in the case of 4C and its exhausting, stressful, and painful bodily *arrhythmias*, a lucid assessment of design of the assemblage would have to re-open to the question of human agency. Rhythmatic to the point of obsession, the design and effect of 4C security assemblage and its plethora of telematic and surveillance technologies and disciplinary and punitive techniques works to roughly operationalize the people who work inside the assemblage into bodies in motion, bodies in stasis. The essential nature of this area of 4C assemblage is perhaps best encapsulated by Blessing's reprimand of an "AWOL" guard from his post: "If everyone was making their own decisions, nothing would work." Without flattening the choices of the company's guards, guarding supervisors, reactions officers, and tactical team, 4C assemblage operates best when bodies of its employees labor less like bodies and more like the technologies they are encased in. Re-inflecting Abdou-Maliq Simone's (2004) Johannesburg-originated concept of "people as infrastructure," this condition of "people as technologies" has the nasty habit of resurfacing deaths and funerals.

> Earlier in the day, I had heard that a guard had also been sick and died. As we drove through Bramley, I ask Blessing, "What was he sick with?" He mumbles, "Yah, he was sick." I press, "Yeah, but what did he have? What was he sick with?" "Ah you know, stress."

Though the specter of HIV/AIDS looms large, it is difficult to ignore the stresses engendered by 4C assemblage and their intense human and biological repercussions. Repercussions that make speed begin to look more like an illusory autonomy, and sleep as the only agency a body has left.

Figure 14: A wooden front gate reveals the inside of a home in Houghton Estate.

Geo-spatiality of crime: openness and walls

"Do you know Cape Town?" I had been spending the day with Eric, 4C's technical manager – in charge of calibrating biometrics scanners for office complexes, designating camera placements for new boom gates, placing outside infrared sensors in freshly built homes, among many other things – when his question popped seemingly out of nowhere. On our way back from a site visit supervising technicians outfitting a new office complex with sensors and relay antennae, I had been exploring his assertion that effective private security did not prevent crime, but only displaced it to other areas. We pulled up into his parking spot outside the office. Slight of build and slightly balding, he turned to me talking with both hands:

> "Do you know Cape Town?" Confused I said,"Yeah, I studied at UCT for sixth months." "Seapoint, Clifton, Camps Bay, all have relatively low crime compared to Joburg. They only have two township centers – Khayelitsha is way out in the Cape Flats and then Hout Bay. And there are really only two highways that go out." I nodded, "Because of the mountain." "Right, so there is few ways to escape. You can't drive a hijacked vehicle through Seapoint these days without

> getting picked by reg. plate recognition. Where Joburg," he lists townships around greater Johannesburg in counter clockwise from the east of Sandton, "we have Alexandra, Tembisa, Diepsloot, Orange Farm. And all different highways to escape from Bryanston or Morningside."

Hijackings and home invasions in Johannesburg, he went on to theorize, could concentrate in one suburban neighborhood and jump to another a month later if the security improved. Bereft of the encircling protection of Table Mountain and the Atlantic and outfitted with an abundance of highways and thoroughfares, crime in Johannesburg like water could well up in the townships, travel across the city's arteries, and flow from high security areas into adjacent less secured suburbs. Intended to be an illustrative answer to the roots of displacement in the city, in his venture into geo-spatiality of crime in South African cities, Eric encapsulated for me one of the underlying discourses at 4C: openness invites crime. Without Cape Town's natural walls of rock and water, the northern suburbs of Johannesburg are vulnerable to crime. This geographic handicap the logic goes is partly responsible for Johannesburg's reputation as the "crime-city" and not incidentally, why the assemblage must mobilize far more stringent home security measures. Andrew was fond of telling the story of the time he was called to design a home security system for a friend who was moving to Cape Town. He recounted it to a room full of chuckling managers, including Eric:

> "I was going through and saying, 'you need a passive sensor here on the roof or the guy will come through the roof.' And the [local private security] guys there were shocked, 'you don't need a roof sensor. That doesn't happen in Cape Town!' 'Well, it happens all the time in Joburg!' Eric chipped in laughing, "In Joburg, clients come to you and ask for off-site monitoring or analytics. In Cape Town, they ask, 'Do you know anyone who can install an automatic gate?'" More laughs.

Joburgers, unlike those unschooled Capetonians, have had to learn all the sophisticated ways of home security, in intricacies of what Eric calls the "bubbles" of home security. He first mentioned the concept on our way to Electrostop, the nearby security system store on Louis Botha Ave. I had been pushing him on what he felt was the most effective home security. A wall? Electric fence? Inside alarm? Outside beams? He hesitated: "Well, you have your concentric circles of security – first is your outside perimeter, then CCTV on the outside, outside passives [infrared motion-detectors sensors], then alarm and sensors on the interior. They work together, like bubbles. If one bubble fails, then there is the next one. But if you can only use one,

it would be an inside alarm with the sensors." He thought it through some more, "No, actually a good physical boundary – wall, electric fence – without it, it would be a target."

A series of bubbles, arranged like airy nesting dolls, is not an image usually associated with home security in South Africa or for that matter anywhere else. Transparent and easily penetrated, a bubble is more likely to represent the opposite of what private security tries to provide. Tag lines of South African home security manufacturers like Trellidor ("The Ultimate Crime Barrier") and Cochrane, the makers of ClearVu, ("Physical Perimeter Security Defence"), read like a collection of creative antonyms for "bubble." Academic prose on the subject has in equal measure focused on home security through the lens of fortification and walling. Urban anthropologists and scholars like Teresa Caldeira (1996, 2000), Mike Davis (2006), and Setha Low (1997, 2001) have argued convincingly that the wealthy urbanites (and suburbanites) of all countries, motivated by an often-racialized fear of crime, have mobilized home security to transform cities like Johannesburg into collections of enclosed "enclaves," maintained and policed by private companies. Caldeira writes of Sao Paulo:

> "São Paulo is today a city of walls. Physical barriers have been constructed everywhere – around houses, apartment buildings, parks, squares, office complexes, and schools. Apartment buildings and house which used to be connected to the street by gardens are now everywhere separated by high fences and walls, and guarded by electronic devices and armed security men." (Caldeira 2000:1)

In this environment, openness, Caldeira (2000) cogently argues, once "one of the most significant organizing values of modern cities," has been evaporated into partitions, leaving a calcified city, insulated from itself (1).

It is difficult to reconcile this discursive academic terrain with Eric's "bubbles" without dismissing him as mistaken or in serious denial. And yet, my time doing ethnographic research alongside Eric and others within the technical wing of 4C's home security business, I came to understand that the metaphor spoke to how many 4C employees perceive their own methods for home security as essentially fallible. Although he sometimes fantasized "100% security" was theoretically possible, but perfect security, he acknowledged, was practically unattainable in Johannesburg. In many separate conversations, Kevin, Mandla, and Connor all volunteered what seemed to be an informal maxim in the company: "If they want to come over, they are coming

over."‡ The figure of the "bubble" in its implied fragility unfolds this belief that home security is inherently frail.

But in addition to signaling 4C's 'always expect the worst' attitude, I began to realize as I spent more time in the northern suburbs that the metaphor of the "bubbles" also accesses something elemental about the way in which home security is configured. Driven by factors more complex than simple desire for walls and fortification, the home security assemblage, as I am calling the myriad, interlocking systems of "home defense," often intentionally creates openings in its own enclosures, holes in its walls. Birthed out of a cauldron of factors including suburban demand for domestic labor, aesthetic desires, and the urge towards peace of mind, the home security assemblage is oscillating towards the immaterial, sacrificing continuity for gaps, opacity for visuality, and stasis for speed. Alongside this trend, knowledge of the inevitability of vulnerability popularized within 4C and the agency of the assemblage itself make for a situation where permeability, not impenetrability becomes the defining feature of the home security assemblage. Johannesburg, then, is equally a city of bubbles as much as it is a city of walls. To be sure, this reality does not overturn Caldeira and others' insights into the primacy of exclusion in city-spaces like Johannesburg, but rather works to illustrate how the materials and technologies deployed to enact this exclusion in home security are inaugurating new and different modes of relating and inhabiting the city at large.

This chapter, formulated on (the basis) of ethnographic fieldwork within the technical wing of 4C and supplemented by walking surveys of home security in suburban neighborhoods of the city, explores in order of size, how three of these concentric and interlocking bubbles of security – the neighborhood fence, "the outside perimeter" or outside wall, and the interior alarm system of individual private homes – are made and unmade.

The Neighborhood Fence: Morningside Manor and domesticated designs

Morningside Manor is a quiet twist of roads, drives, and avenues sandwiched between busy Rivonia Rd in the west and Bowling Ave east. A small residential section of Sandton,

‡ Although "bubbles" is an "Eric-ism," it has currency with other 4C employees. In one conversation, Kevin commented on the metaphor saying, "Yah, it's a basic concept. You want to have overlapping security. Independent systems, but integrated as well. Yah, it's a typical concept."

Morningside Manor's neatly plastered and bricked walls sit about two meters high above precisely trimmed grass verges. Edging the area's looping asphalt roads, they provide a pleasantly pastel border for what is a quintessential northern suburb. Despite being only ten minutes north from Sandton CBD and just a twenty-five minute trip up the M1 from Johannesburg CBD, the residents of Morningside Manor have a strangely byzantine commute. The large caution yellow signs which stand in the center of Bowling Avenue provide the first hint as to why:

WARNING
TEMPORARY ROAD CLOSURE
PLEASE USE ALTERNATIVE
ENTRANCE IN
RIDGEWAY DRIVE

Figure 15: Looking through "temporary road closure" across Hailes Road into Morningside Manor

The first of these "temporary road closures" is fitted snugly between the walls of those corner homes along Bowling, bridging the pavement of Hailes Rd. Connecting up with the exterior facing walls of private homes around the outer edge of the suburb, the palisade fences of green metal not only lock off Hailes, but Lawnmarket, Lynton, and Ratcliffe roads and the patches of green-space to the south and west from the interior of Morningside Manor. Initiated and constructed by the neighborhood committee with municipal approval, road closures have

transformed the former entrances and exits onto Bowling Ave into cul-de-sacs and ringed the small neighborhood with what is in effect one continuous wall. Eric summarized the impetus behind this neighborhood-sized bubble of home security, "People thought if they walled in the suburb it would make it safer. But the criminals don't care."

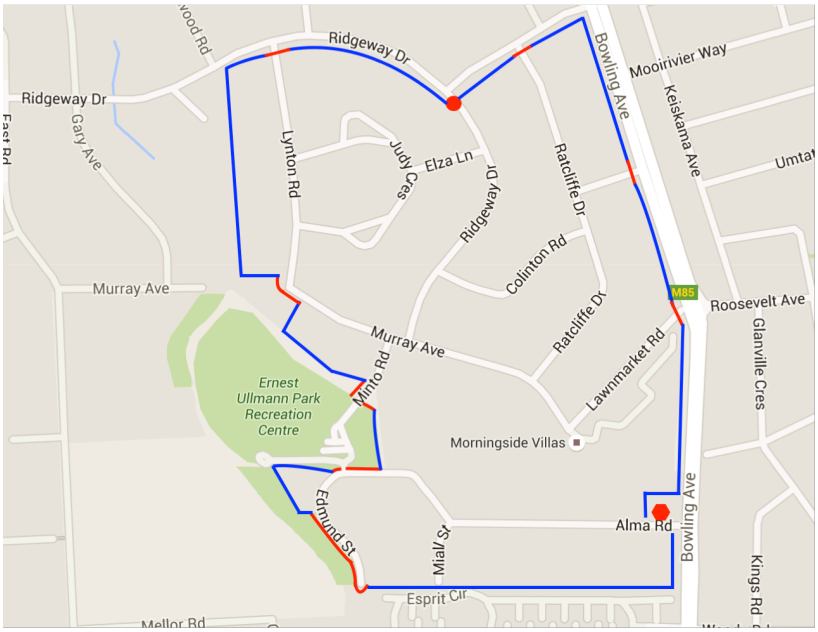

Figure 16: Map of enclosure around Morningside Manor. The red lines mark position of green palisade fencing, including road closures; the blue lines mark walls of private homes continuous to palisade fencing. The red circle and pentagon mark boom gate and guardhouse respectively.

I visited the 4C's operated neighborhood on a cool day in June to study the Ridgeway boom gate and get a feel for a typical 4C area. As I walked down Ridgeway, I discovered what Morningside Manor's residents know and most visitors learn: there are only two entrances and exits in the neighborhood fence – the first at a 4C boom gate, furnished with six cameras monitored from W0, at the corner of Ridgeway and Blackford, and the second past a single aluminum and wood guardhouse at the east end of Alma Rd. This maze-like quality of the suburb makes getting lost looking for an exit/entrance a fairly typical experience as I learned a few weeks after my visit to Morningside, with Eric and his supervising technician Viljoen. We were on our way out of a new 4C's neighborhood near Bryanston following a site visit for a new boom gate:

> I looked up from my notebook to see Eric had unknowingly driven the SUV into the cul-de-sac of a road closure. He was lost. "I am trying to find the other side of this place," he muttered. Viljoen commented seriously, "Yah, these road closures confuse a person." Leafing through his phone's map, Eric agrees, "They are a problem." Finding a route he sets the phone down and drives down another street. Another road closure. "Where am I now?" he wonders aloud. "*That* is where I want to get to," pointing to the busy road beyond the road closure. He checks his phone again. We reverse in the cul-de-sac and hurtle back down the street and turn right down another long street to find the other boom gate and finally a way out.

Designed and erected in response to a wave of hijackings and home invasions in the early and mid-nineties, similarly befuddling green palisade and now recently ClearVu fences encircle much of the northern suburbs from the rest of the city. Everyone at 4C I spoke to was pessimistic about the actual effectiveness of road closures and the neighborhood fences they form. Connor was dismissive. "It's a false sense of security," he told me driving through an area adjacent to Morningside Manor. "They [criminals] still drive through the boom." But even so, as a boundary between "their area" and the outside, the neighborhood fence is a fundamental unit of the home security assemblage, marking where 4C's security responsibility begins and ends, what they actively monitor, patrol, and respond to in the service of their clients' security.

In this enclosed and patrolled environment, it would be easy to assume that smaller suburban neighborhoods like Morningside Manor are sleepily uneventful, even deserted during the day – its residents away at work or school and non-residents largely discouraged from entering. But a short walk through Morningside Manor during the week between 6pm and 6am reveals that the area is in fact a buzz of activity. Telkom & DSTV vehicles, large moving vans, bakkies piled high with landscaping refuse, an odd pool maintenance truck, and privately-owned BMWs, Mercedes, and Audis also steadily stream into the neighborhood through the boom gate on Ridgeway. There are many people walking up and down the streets; it is almost always black men in blue overalls and black women in long smocks – walking dogs, escorting schoolchildren home, watering lawns and tending gardens, rebricking cobblestone driveways, coming in and out of gates. Far from cloistered, Morningside Manor is burgeoning with the rhythms of suburban domesticity.

Pedestrian gates, or "ped" gates, narrow turnstiles and V-shaped gaps in the green metal, made just wide enough for a walking body to pass through, are attest to the manner in which the neighborhood fence has been interpenetrated with these rhythms and the racialized structure of domestic labor which undergirds them. Although of course not limited to a particular sort of pedestrian, in a city where "only the poor walk anywhere" the pedestrian gates function not so much as accommodations for car-driving residents, who predominantly use cars, but for non-resident workers who commute every morning and evening to the suburbs on foot from the major taxi routes. Although these pedestrian gates cannot be locked according to South African laws protecting freedom of movement (Landman and Badenhorst 2015:219), it is not

coincidental that in Morningside Manor, all the pedestrian gates in Morningside Manor front Bowling Ave, a major taxi route, and none front the greenspace of Ernest Ullman Park.

Although certainly the most significant accommodation to the structure of domestic labor in the city, other features indicate the openings domesticity has made in the neighborhood fence, and the home security assemblage at large. Some boom gates are installed with two push buttons, one at the eye level of a private car and another a meter higher for commercial vans and large service bakkies. A handful of Morningside homes, I noticed, left their gates ajar to allow workers to move in and out freely, while many more domestic workers simply have gate remotes for the homes they work in.

Figure 17: Looking through the neighborhood fence complete with a turnstile pedestrian gate from the cul-de-sac of Lawnmarket Rd in Morningside Manor

Despite being largely normalized into the cartography of the northern suburbs by the peculiar demands of South African suburban domesticity, the openings presented by boom gates and pedestrian gate still represent a degree of risk for 4C. As such, managers will often order the company's tactical unit and the odd guarding supervisor like Blessing or John to conduct patrols for suspicious pedestrians and vehicles in areas recently hit by major crimes. While Connor and Mandla are much more confident in their ability to spot potential criminals with just a glance – "ag, you can just see them, bru" –, the same patrols with Blessing often involve many stops, with meticulous record keeping of vehicles parked in the street (assumed to be non-resident vehicles as residents park inside their gates) or with interrogations of passing pedestrians. Although intended to identify criminals scouting new hits or infiltrating an area on foot to circumvent

guards alert to "more than one Bravo Mikes in a vehicle," these patrols work towards a situation wherein municipal regulations that attempt to work against racial exclusion become immaterial and the need for a neat garden and a immaculately clean home authorize black pedestrians' presence in the suburb.

> Driving along College Rd in Bryanston, we come across another black guy who just came through the pedestrian gate in the ClearVu neighborhood fence which walled off the park. [...] After a short interrogation, Blessing summarizes for me: The man was living in the park and claiming to be on his way to visit his brother who worked inside at one of the townhouse complexes to retrieve a cell phone. Blessing informs him strictly in English, "You are not allowed to be inside. If something happens you will be suspicious." [...] Watching as the man leaves through the pedestrian gate, I ask, "Why isn't he allowed inside?" Blessing explains matter-of-factly, "This is one of these guys who presses the intercoms to ask for jobs. It's dangerous in this area." A few minutes later, we drive past two black women walking in the street and chatting. I press, "Why weren't they suspicious?" He dismisses the idea, "No, they are domestic workers. There are no black women in this area who are not working." He emphasizes, "It's body language! A person who doesn't know where he is going is looking all over the place." We drive along another side street and come by three black guys sitting along a curb. Blessing slows up, "Lunch?" They nod. He asks them where they were working. "21 Cambridge," the oldest man offers grumpily. Blessing pulls away, taking up the discussion again, "They are on lunch, you can see. It's this something they call body language, you can see they are on lunch."

Although prohibited from locking pedestrian gates, the substance of these patrols make clear that the absolute exclusionary nature of the locks would conflict with the selective inclusion demanded by the racial structure of domesticity. Without locks (or legal authority to do so), Blessing adopts a carefully tuned understanding of gender, race, and the micro-geographies of the suburb to include those desired non-resident like gardeners and domestic workers while excluding those undesired to the outside of the neighborhood fence. At the risk of over-projecting the impact of these sporadic patrols, the assemblage in these interrogations becomes the handmaiden of the structure of South African domesticity.

But even domestic workers come under conditions of acute surveillance like that performed by Blessing. Tales of domestic workers, sneakily collaborating with criminal gangs or imprudent enough to let in home invaders pretending to be Telkom or other service workers, circulate around W0, 4C, and the city more broadly. And in the event of a home invasion,

domestic workers often fall under degrees of suspicion. One morning in November, two women, one white and middle-aged in a long colorful skirt and *tichel*, the other black and quite younger in a light blue cover-all smock, arrived at the lobby of the office.

> Sitting idly for Mandla to gather himself, I watch as the white woman announces to Nozi from the accounting office that she has an appointment for a polygraph for 9am this morning with James. "James is not in the office at the moment. He is at a meeting," Nozi politely informs her. The woman is unhappy. "When will he be back? I can't wait all day!" They sit and the younger woman puts her head down on the lobby table in exasperation. Later in the day I ask Kevin about it, "Is it common for someone to come in here and order a polygraph for their domestic worker?" "Not that common, usually only after an incident."

Although 4C usually reserves their polygraph services to test all employees, including supervisors and directors (as Marshal was careful to remind me), against involvement in criminal activities, the practice of subjecting domestic workers to polygraph tests is fairly common across the industry. 4C's sister company advertises "pre and post employment checks" on their website including polygraphs for "a nominal fee." These sorts of patrols and polygraphs work to ensure that the openings of the pedestrian gates do not become overly dangerous openings. The bubble of the neighborhood fence then is always physically permeable through the openings of the pedestrian gates that are never closed. But in many ways, it remains foreclosed, or rather domesticated by how the entanglement of race and mobility continue to determine the acceptable ways of being and relating in the suburbs.

Figure 18: Man, far right, climbs ladder in Linksfield, to trim hedge away from interfering with the electric fence

"For a Nice View:" outside perimeters, or invisible and visual walls

Skirting the treadmill piled with neatly pressed clothes, I peered out the window. Eric was fiddling with the homeowner's router plugged under their bedside table, while Moshe, the brown-haired middle-aged technical head of 4C sister company, had been idly fielding my queries on the intricacies of home security. Pointing at a lanky palm tree that had grown right up against the inside of the home's pastel yellow outside wall, I ask Moshe, "What about trees close to walls?" He's quick, "It's a problem, that one there is interfering with the electric fence. And it could cause a weak point in their neighbors fencing." Wondering how old the tree is, I ask, "When did all of the walls go up?" He thought on it, "Around ninety four, and a few years earlier, the outside perimeters went up. I remember when I was small, my neighbor didn't have a fence. During apartheid there was no need for it. It was purely privacy. Before people didn't have sensors outside their house, and maybe only an alarm inside." But even today he admits, referring back to the palm tree, "People will risk their security for a nice view."

Whether coming in the form a leafy backyard, an unobtrusive electric fence, or a beautifully wrought gate, the home security assemblage is often preoccupied by aesthetic desires. While desires for walling and other exclusionary measures appear across neighborhoods and demographics in Johannesburg, as Jo Beall illustrates in her 2002 study of Sowetans and suburbanites, the desire and ability to make home security aesthetically pleasing and even

beautiful is perhaps what sets the suburban home security assemblage apart. As the first (and sometimes only) face for homes in the suburbs, it is "outside perimeters" – the industry term for walls and fences around individual homes or complexes – that have become the most ready canvas for the aesthetic preferences of suburbanites. As a result, the exteriors of the "outside perimeters" of 4C's neighborhoods and the northern suburbs are a mixed bag of status statements and homeowner's tastes, peppering the canyon-like horizon with gates intricately wrought in geometric designs, walls with immaculate paint jobs, crisp arches, classical columns, and cornices, and even thick corner wall segments with terracotta planters and functioning water fountains.

As active members of the northern suburb's tight Jewish community, Eric and Moshe are no strangers to the architectural mores of the northern suburbs. Following his frenetic schedule, Eric and I would often head to site visits in areas dotted with the homes of his friends and acquaintances and work in many more areas populated with people who could easily be his friends and acquaintances. But having gotten his start in the industry working "close body protection" before starting his own technical security company which was later merged with 4C, he has, I learned, more than a healthy amount of experience with clients with extravagant demands. In many ways, he sees both sides, understanding client's aesthetic desires while seeing how they can potentially hurt their overall security. Mechanically minded, he is sometimes able to improvise a technical solution that balances effectiveness and aesthetics.

> Finished with calibrating the new analytics-enabled cameras at the complex in Birdhaven, we pass a light brown wall layered with a low-lying electric fence, extended from a squat metal "T" so that the four poles spread horizontally just an inch or so above the top of the wall's cap rather than the typical vertical spires. I ask Eric about them as he lights another cigarette, "Is it mostly aesthetic that they use that type of fencing?" He glances and grimaces, "I don't like it. I have a few clients that have it installed, just cause of aesthetics. But it is not as effective. What I have instead done is take a 6-bolt pole instead of the four so it extends on either side. It becomes much more difficult to mess with."

Without a major governmental body regulating the specifications of most security technologies and products, Eric is free to do these sorts of improvisations for 4C clients.[§] But being only one

[§] Only electric fences, Eric related, are regulated, with specifications pertaining earth spikes and caution signs, voltage levels, lightening strike safeguards, etc. Additionally, there is a non-governmental

man at one private security company, there are many and more homeowners that don't benefit from his innovations. A trip with Eric through the northern suburbs can be an education in the compromises clients make in their security for the sake of beauty.

> We round a corner along a green palisade fence separating the neighborhood from a strip of green space with a little spruit running through its middle. Eric points out a house fronting the green space, whose plaster wall along the street now behind us, ends at the palisade fencing, leaving only the green metal as their only separation from the greenspace. "Many people don't want to lose the view of the river." Mindful of the bad reputation greenspaces have, I question, "So what do they do instead?" "They probably leave their outside sensors on a lot of the time."

In a city as gritty and concrete-heavy as Joburg, less security for more greenery is a trade-of

Figure 19: A home in Morningside Manor with a composite grated steel and brick wall topped with (barely visible) overhanging electric fencing

organization, SASSETA, which offers guidelines. 4C, however, is not SASSETA-accredited as sending technicians through the organization's certification courses was deemed unnecessary as well as too costly.

some suburbanites seem willing to take. One house of a particularly wealthy (and pampered) client in Saxonwold I visited with Blessing had substituted an electric fence for a tiny forest of tightly packed bamboo, now the home to a flock of noisy sparrows. One can spot other homes making similar landscaping choices like one near by my residence in Parktown on St. Andrews Rd that have grown vines along the top of their outside walls, effectively short-circuiting in their electric fencing. While there are more than a few greenery loving homeowners willing to forfeit physical permeability for visual impermeability, many others follow the model of the home in Melrose, opting for more visibility rather than more privacy. A drive through Morningside Manor, Houghton, Linksfield, or Bryanston will reveal homes that have forgone with the typical thick brick-and-plaster wall for pillars joined by panels of grated and barred steel and then electric fencing (see Figures 5 & 6).

Other homes have done away with pillars altogether and adopted increasingly ubiquitous ClearVu "Invisible Wall" fencing for their outside perimeters. Taken together these see-through walls signal a change in the aesthetic tides, a shift away from opacity towards visuality. Reflecting on ClearVu, Eric let me know he has mixed feelings about the trend.

> "It's an interesting product," he muses. "They've made it so it's, you know, 'un-climbable' and 'invisible'. But I've seen it crumple with a car hitting it with not that much force." he waves in the direct of Louis Botha. "And it's not cheap, each panel is about twenty five hundred rand per meter." Wheeling over a speed hump, he continues, "There was a change of thinking. At first, it was thought it was a good safety measure – to be able to see into your backyard because if there was anything going on it would be visible from the street. But there are drawbacks. If some guy pulls up and then points a gun at you through the fence, then what?" He shrugs.

Openings for Eric, although useful or arguably necessary for life in the city, always seem to present the threat of increased vulnerability. But even so, Eric has been able to mobilize other technologies like infrared sensors and CCTV cameras to fill the gaps presented by these aesthetic openings. The tactic of replacing walls with more surveillance is not particularly new in the industry or 4C. Several of W0's oldest feeds pull from CCTV cameras installed over client's gates, which are not coincidentally considered to be always the weakest section of home security.

Recently, Andrew has had cameras and infrared sensors trained over pedestrians gates in their areas in Petervale and eastern Bryanston.

Figure 20: An office complex in Rosebank without an perimeter wall or fence has been equipped with Paradox NVR780s, visible on center right pillar and far left pillar.

But interestingly, the technologies which Eric has been more recently and frequently deploying do not only fill a gap with another electronic eye – so to speak, but rather have a electronic eye mimic a wall. The Paradox NV780 passive infrared sensor models are one of the clearest examples of this development. Released in 2012, the Paradox 780s, pictured in Figure 17, are a newer take on the familiar infrared motion sensor, commonly known as "passives" in the industry. All infrared motion sensors are essentially light receptors, but unlike the human eye which operates off of visible light, passives are sensitive to contrasts in infrared radiation. Calibrated to the ambient radiation levels, they are designed to trigger if any thing, which does not match the ambient temperature of the air, enters its field of view. Standard sensors have fields of view or "beams" that extend in a 90° radius from the face of the unit. But new models like the Paradox 780 use four discrete fields of view, two on each side extending out for a dozen meters along the surface the unit is affixed to. Splaying their "beams" out at adjustable angles, the 780s zone out an area of at least 24 m^2 on either side. Dependent only on infrared radiation, they in effect create an incorporeal smart wall between the affixed surface and any entity, human and otherwise, which might threaten at any time of the day or night.

New CCTV-based analytics programs (meant to be more sophisticated and discerning than those now in W0) which Eric and Moshe have been jointly beta-testing are been enabled to create similarly invisible walls. One morning in late August, Eric got a call from Moshe that the home they had two months ago outfitted with new advanced analytics cameras had been hit the past morning by a scrap thief, who had made off a brass mailbox and matching lamp fixtures.

Theoretically, the cameras' advanced analytics software digitally mapped the street, detected moving human and car-sized objects and alerted C1,"Charlie One," 4C's sister company control room. Calibrated to alert if an object spent more than a few seconds in its view, the analytics had been designed to prevent just just such an event. When we arrived to the house, Moshe expressed his wonder at the odds. "What are the chances? The one house we install this new software in gets hit!" The probability aside, it was still unknown why the system had failed.

> Moshe retraces the thief's path along the pavement with measured steps, as he had seen from the footage. Down the middle of the street then at a diagonal towards the door, a few moments at the door and out of view of the cameras, then another diagonal out and down the street. Had the software worked? He calls into C1. No alerts on their end. Buzzing the intercom, a domestic worker in her mid-40s lets us through the gate. She had been expecting us it seems, handing over her gate remote to Eric as she leads us into the house. The four of us traipse across the white-carpeted living room to the CCTV router above the back door of the kitchen. Plugging in with Eric's laptop, we pull the simultaneous feed, while she quietly washes and stacks fine china in preparation for what looked to be a large dinner party. Moshe recounts how he had tested it yesterday afternoon as well – "zigzagging" and "in the car stopping and starting and slowly driving." No alerts. Eric scrolls through explaining the ruleset in the software, as I peer over his shoulder. Somehow the rule for looking for 'loitering pedestrians' overlapped with the rule for 'vehicles entering'. "We could use a tripwire," he suggests. He clicks at two points along the curb as seen in the window of the software. A line in digital blue connects the two points. Anything moving slower across the tripwire than six meters per second will send an alert to C1, meaning that any car pulling into the gate will be excluded. [...] We head back out and test the tripwire; C1 calls – it's working. Continuing his explanation of the software, Eric tells me that the fence tool, which could be drawn with multiple vertices, would have probably worked as well.

A few weeks later, the fence tool proved to be useful. Called to a townhouse complex in Birdhaven which was replacing their gatehouse guard with a camera array, Eric decided to use the opportunity to expand the advanced analytics tests. But because the outside cameras peered down onto two bent curbs edged with low bushes, the tripwire option, a straight line set to alert if a object passed over it, was out of the question due to the irregular shape of the curb. Adopting the fence tool, which could be set with angles and curves in it, Eric drew boxy 'L'-shapes on the top of the manicured bushes, calibrated to catch anyone on their way to climb the wall. Some weeks later during a visit to W0, I notice the same feed is being actively monitored by the CCTV

controller. A woman in high heels strolls by, her elbow swings over the bright green "fence;" a noisy alert pops up in front of Rodney. He glances over and dismisses it with a yawn.

Although still dealing with a number of these false positives, these new analytics programs have succeeded, filling gaps in the walls with distant, but (mostly) attentive eyes. Unlike ClearVu's "Invisible Wall" which as Eric points out opens up bodies to outside vulnerabilities, these walls that try to see evaporate that vulnerable body in a logic reminiscent of the military drone. The outside perimeter, so thoroughly bubbled by contradictory aesthetic preferences for privacy or increasing visibility, has been buttressed by new sensors and cameras which rather than block the view, multiply avenues of vision to potentially threatening bodies, entrenching visuality as the means and medium of the wall.

Time inside the bubble: panic and urgency

On my days with Eric, I would usually finds myself tagging along as he laid out plans for new boom gates, met with big clients or security tech salesmen, troubleshot biometrics for huge office complexes, and supervised the installation of innovative projects like a license plate recognition arrays in Norwood. With his talents in such high demand, he had little time to spare on the small, routine jobs like alarm and sensor installations. As a result, there were only a few occasions where he and I entered that smallest and most neurosis-inducing bubble, the interior of private homes.

Nestled within that plethora of physical barriers that are the neighborhood fence, the outside perimeter, and the walls of each home, itself fortified with burglar bars and exterior security doors, the interiors of the suburban home typically only have one physical security measure – the bedroom security door. A swinging or sliding gate or accordion of metal, the security door or "safe zone" gate, as the South African security manufacturer Trellidor markets them, are usually placed in front of bedroom doors or at the top of second level stairs. Although useful as makeshift panic rooms in case of emergency, the bedroom security door is designed for nightly use, allowing users to lock themselves into their bedrooms each night before falling asleep.

But even if the residents were inclined to use the fullness of their homes at night, their interior alarm systems make it particularly impractical. Although most interior alarm systems also use magnetic door contacts which alert if/when a outside door is opened, the "quick-and-dirty" alarm system, Kevin explained to me, only needs an alarm control panel and standard

passive sensors trained over windows, doors, and the panel itself. When activated, the beams of the sensors will alert the alarm panel of a trigger and begin a countdown of between thirty to forty seconds. If the countdown reaches zero without the correct code entered into the keypad, the alarm will go off, sending a transmission to W0 that a potential crime is in progress. The length of the countdown can be customized on the control panel, but one must be judicious, as Kevin informed me, about lengthening it as each second is a second that the armed response is delayed.

Not surprisingly, these repetitive countdowns engender an environment of tedium and anxiety. Eric and I visited the townhouse apartment of a friend of his who had called him up about adjusting his alarm system. But as Eric explained, his friend was unhappy. As his townhouse was spread over three-floor townhouse, the system's panel, always placed at the entrance of the home, was down a flight of stairs from the living area and two flights from the bedroom. Each night before he went to bed and each morning before he could begin his day, Eric's friend was forced to run up and down the stairs to arm and disarm the system before he could use the rest of his home. He was tired of the rushing and had asked Eric to investigate whether he could put another panel beside the bedroom and inside his bedroom security door, avoiding the staircases altogether. Watching Eric investigate whether he could place wires along the apartment's concrete walls or needed to use a wireless panel, I was reminded of the opening lines of Ivan Vladislavic's 2009 book *Portrait with Keys* where he compares his alarm to a bomb. Designed to provide restful peace of mind, the alarm in Vladislavic's house produces a kinetic anxiety, a disciplined restlessness. He writes: "When a house has been alarmed, it becomes explosive. It must be armed and disarmed several times a day. When it is armed, by the touching of keys upon a pad, it emits a whine that sends the occupants rushing out, banging the door behind them. There are no leisurely departures...There are no savoured homecomings" (2009:11).

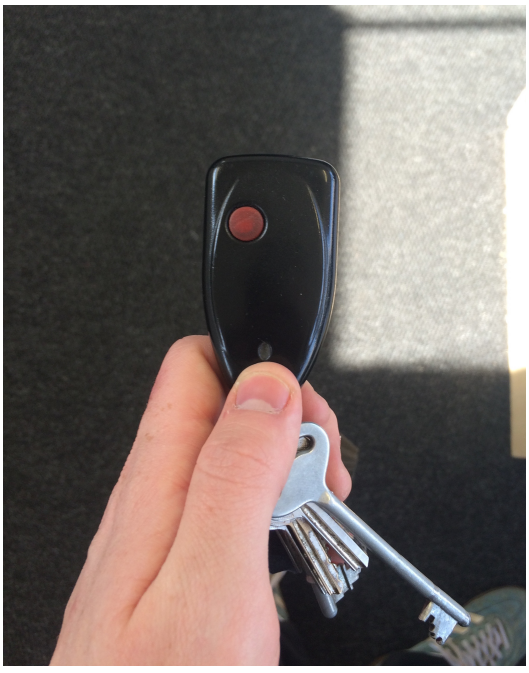

Figure 21: W0's panic button to be pressed in case of attack on the control room. Designed to attach to keychains, most remotes are outfitted with buttons which can be programmed to open gates and garage doors

Encapsulated most vividly in the figure of the panic button, a remote which once pressed summons armed reactions officers (and the single biggest culprit in generating false alarms in W0), these organized urgencies and timed anxieties of home security accompany homeowners throughout the day, re-patterning their lifestyle in small but persistent ways. But as Eric reminded me in a conversation about the differences in American and South African private security, the inconvenience is tolerated mostly due to the fact that the stakes are considered to be as high as they come.

> I tell him the story my dad's family had lost their house keys when he was still little and how instead of replacing the locks simply left the front door open for forty some years. He smiles. I continue, "We do have ADT in the U.S., but not many people have it. My house doesn't have it, maybe celebrities or very wealthy people," I muse. He is suddenly enthusiastic, "You know in the U.S. alarms are for insurance companies, to limit their liability. Most house breakings happen when no one is home. Ten minutes of a burglary they can only take so much stuff. In South Africa people want it to stop their family from being killed!"

For those living in the bubble, the time of the interior alarm system in its connection to armed response is not simply a metronome for daily life, but the very essence of security. Time as a substance of speed is the thing that brings the people who will protect you from harm. Inside the outside walls and inside barriers, in the end it is the timing of others that forms the surface of the smallest bubble, the metaphorical soap.

Figure 22: A brick wall in Linksfield buckles under its own weight

The Moral of the Electric Fence: home security failures and successes

Although it is among the most iconic and ubiquitous symbols of home security in the city, I did not realize until far into my research that the electric fence has a temporal function not unlike a panic button. Not realizing that its design was two-fold, I had

assumed the fence was a purely exclusionary measure, joining metal spikes, broken glass, and razor wires promising pain as physical disincentive to intruders. But as I questioned Dean and later Kevin about the arrangement of circuits, wires, and energizers in the typical fence, I learned that when contacted the fence not only deliver a shock to any body it contacts, it also sends an alert to the control room that the circuit has been broken and armed response should be dispatched as an intruder might be entering. The fence is punitive and communicative.

But for a technology as versatile as it is, the electric fence is hardly reliable. Delicate and expensive to install and maintain, middle income neighborhoods like Norwood, Waverly, and Bramley, Eric pointed out to me, are full of homes encased with totally broken electric fencing. Dependent on the creation of an uninterrupted circuit, rust, errant tree branches, thunderstorms, and loadshedding can render a fence inoperable. The sound of these broken fences snap-snapping is as familiar to suburbanites as false electric fence activations are to the controllers of W0. Although particularly temperamental, failures are certainly not peculiar to electric fences. Private walls cave in under their own weight, warm breezes trick infrared sensors into making dozen activations of alarms per hour, sparrows flit across fences drawn by analytics-enabled cameras. New materialists would rightly point out that such failures to function are part of the agency of the assemblage.

But as this chapter attempts to illuminate, although an unavoidable cause of the fragility of the home security bubbles, the home security assemblage is not only opened up by the endogenous unpredictability of objects. Rather, in its design and quotidian functioning and indeed failing, the home security assemblage, moved by a mismatch of desires, is dancing between opening and closing, permeability and fortification, free and regimented movement. The bubbles of the city Johannesburg are not just fragile with the inevitability of crime or the fallibility of their materials, but they are also variegated, shot through with the intricacies of suburban life in the city, which they simultaneously inhabit and attempt to wall off. In this way, these materials of exclusion that make up the city of bubbles have become less like a barrier and more like a relational interface between the inside and the outside – a membrane of mediation animating and animated in uneven spurts by pulls of aesthetic and domestic desires, enclosure and visibility, surveillance and privacy and invasion.

A Note Before Concluding

Independently conceived and strongly ethnographic, the three preceding chapters have attempted to sketch how the private security assemblage operates in and impacts on the human and physical terrain of the city of Johannesburg. With a nod to the monographs of old anthropology, their primary object was to provide a soup of "thick description" with some social theory to salt. As I considered how to write the conclusion to this report, the discrete and specific nature of the three ethnographies weighed heavily on my mind. As I wrote, I became more and more disinterested in formulating a traditional conclusion which at best could rehearse my new materialist framework and at worst flatten the depth and contradictions of meanings in the ethnographic moments.

Instead, during these failed attempts, I was drawn back to the writing of Roberto Esposito, an Italian political theorist whose work on biopolitics captured my imagination throughout the project. Rather than hide the insights his writing brought to me, I felt compelled to bring them into my conclusion and offer Esposito's work as a hermeneutic tool for understanding the assemblage. Without thorough connections or stylistic continuity with the report's preceding chapters, the conclusion that follows might not be conclusion at all, perhaps only a bad excuse to under-analyze and oversimplify the complex waves of sociality, materiality, and discourse at play in the preceding chapters. But a sympathetic reader, I believe, will perceive how this conclusion is deeply in conversation with the poetics and insights of the preceding chapters. And so, rather than a traditional ending, it is then perhaps best read like an experimental meta-narrative for the preceding three, a parallel abstract thought – clarifying in its moments of overlap and fruitful in its divergence.

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Biometrics and Biopolitics: designs and (dys)functions of *immunization*

"The body is both the instrument and terrain of this battle." – Roberto Esposito, *Immunitas*

I slid my index finger onto the small glass rectangle, leaving only a rounded edge of neon blue light. There was a moment's pause then the biometrics unit blinkered red. I tried my thumb, then every other finger on my right hand – red, red, red, red. The building manager had called Eric into the merchandising company's office to sort out why their biometrics units were not

registering the fingerprints of new hires as valid. Inside the server room, Eric was fiddling through the biometrics' software interface. Bored, I had gone to the biometrics pad outside the server door, knowing that without scans of my fingerprints it would have no reason to validate under my fingers. But it was entertaining to see the light under the glass register my touch, pause as if pondering the trustworthiness of each of my fingers, then turn red.

The design of biometric scanners, although more advanced than comparable systems, is nothing new in the larger scheme of the assemblage. Their careful attention to the contours of human fingers, the way the light of the scanners seizes and perceives each person's whorls and arches, simply act out another instance how intimately intertwined of bodies and technologies have become in the assemblage. As tools for human utility, all technologies by definition must consider the human body in some way or another. But the relationship between bodies and technology in the assemblage is peculiar for a few reasons. We have already explored, particularly in the second chapter, one of these peculiarities in the relationship between the bodies of guards and reactions officers and the techniques and technologies that proliferate in their work. Although some of these techniques and technologies, like bullet-proof vests, handguns, and handcuffs are tools for the day-to-day of security, many others operate in the mould of Foucauldian biopower, working towards a situation wherein the bodies of employees are disciplined through surveillance, punishment, and humiliation to operate more like technologies than the humans they are. And yet in a curious divergence from the Foucauldian schematic, the discipline in the assemblage is applied is not "to make" the bodies of employees "live," but rather exposes them systematically to various situations of injury, sickness, and death. Rather, it is two other groups of bodies, that of more concern to the design of the assemblage: clients who are by definition "made to live" and outsiders, proximate to criminals, who are sometimes "made to die."

The assemblage's relationship to these two groups of bodies brings us to the second peculiar nature of the entanglement between bodies and technologies in the assemblage. Namely, how the assemblage's design is suffused with an intensely focused anatomical and behavioral knowledges of human bodies. These knowledges are directed in opposite modes: one focused on enhancement, generally targeting the bodies of clients, and the second focused on elimination and negation, generally targeting the bodies of outsiders/criminals. The technologies of enhancement are oriented ergonomically around cultivating the power and sensorial experience

of embodiment. Namely, but not exclusively found in home security, these technologies are designed around desires for domestic comfort, for visuality and aesthetic beauty, for the palliation of adverse emotional states like panic and fear, for the convenience of speed, and for the ability to dispense violent force. At the other end of the spectrum are technologies of elimination/negation, oriented tactically around using embodiment as a field of leverage. Found across the assemblage, but particularly in surveillance and walling, these technologies are premised on their ability to exert influence on the body's corporeality – its physical presence and dimensions, on the body's racial-visual appearance, on its radiant heat, its aversion to pain, its ability to conduct electricity, on the idiosyncrasy of fingerprints.

What sort of biopolitical arrangement is this? The methods of biopower indisputedly form the gritty details of the assemblage's design, but they target three separate groups of bodies distinctly. One population is disciplined, but exposed to injury and death; another is made to live, but not intentionally disciplined; and a third is regarded with exclusion and sometimes intentionally killed. In his 2011 book *Immunitas*, Italian political theorist Roberto Esposito offers a means to untie this knot in understanding the design of the assemblage. In a broader argument on the relationship between human bodies and human societies, Esposito recommends the concept of *immunity* and *immunization*, the process through which *immunity* is created, as the keys to understanding the intricacies of biopower in human societies. *Immunization*, he tells us, "as a protective response in the face of risk," is the instrument through which societies construct their outer limits and their internal boundaries (1). "The risk," he specifies, "has to do with trespassing or violating borders. The threat is located, always on the border between the inside and the outside, between the self and other, the individual and the common. Someone or something penetrates the body – individual or collective – and alters it, transforms it, corrupts it" (2). Considered conceptually, immunization as described is not far off from security.

But immunization's relationship to security only begins to come into focus in its relationship to *community*. Beginning with their etymologically linkage in the Latin root *munus* meaning "task, obligation, duty," Esposito lays out how *immunity* and *community* are fundamentally in tension. Describing *community* is a state where everything is set in common, he plays out how *immunity* as the negation of that radical mutuality. As such, *immunization* is "privative," the process of limiting *community*, of protecting the individual body and the body politic from the threat of dissolution by the demands of a greater *community*. Set within this

tension with those who in *community*, *immunity* is then rightly understood as a comparative privilege, a state of being where the immunized body is particular. *Immunity* is "an exception to a common condition" (Esposito 2013, 84).

Viewed from the hermeneutic of *immunity*, the security assemblage's schizophrenic application of the means and ends of biopower enters into intelligibility. Rather than populations in a Foucauldian sense, those three groups – clients those for whom the assemblage works, employees those who work for the assemblage, and outsiders, those the assemblage works to exclude, eliminate, punish – are better understood as positions within the schematic of *immunization* – those who are immune, those who immunize, and those who threaten the immune with dissolution. Through this schematic, not only does the diversity of technological design in the assemblage become understandable, but a curious poetry in the design of the assemblage emerges – specifically how the assemblage has begun mimicking the patterns of the human immune system, or rather how it is militaristically understood. As we have seen in chapters one, two, and three, the assemblage is designed to see and discern between insiders and outsiders, to circulate its own mobile "hunter-killers" charged with locating and eliminating outside invaders, to erect around the immune barriers and enclosures, cell walls from potential invaders.

But as Esposito's genealogy of *immunity* displays, the processes of *immunization* cannot be identified simply through their resemblance to other mechanisms of immunity, but rather through the manner in which *immunity*, in model the vaccine, is attained by appropriating characteristics of the outside threat into the life of the body. Mindful of this, how can the private security assemblage be seen to engage in the processes of *immunization*? In *Immunitas*, Esposito's examination of the relationship between law and violence as the processes of *immunization* hints at the first of two process of *immunization* in the assemblage. Reading Walter Benjamin's writing on *gewalt*, he notes how although it constitutes the ultimate risk to the law, the law does not banish violence from society. Indeed violence as the sole purview of law and becomes in fact the essential ward against the dissolution of the law and those lives under its *immunizing* protection (2011, 29-36). This paradoxical use of violence against violence can be ascertained quite readily in the assemblage's orientation towards the bodies of outsiders, those it imagines to be criminal. This immunitary appropriation of violence is in part why race as a violent mechanism of control is so readily taken up within the assemblage. As Achille Mbembe

(2013) usefully points out, racism is the divider between "who must live and who must die" (16). As an entity designed around its appropriation of violence, it is perhaps to be expected that the assemblage leverage a category with as much violent potentiality as race has. But even more pertinently, it cannot be ignored that whiteness is an example of *immunity* par excellence. Founded in violence, grounded in comparative privileges, concerned obsessively with its own corruption, and diametric in its opposition to states of "being in common, it is natural that the northern suburbs as a space disproportionately caught up in the reproduction of whiteness invests within the assemblage a propensity for leveraging the humiliations and luxuries of race.

In the quotidian details of this sympathetic relationship between whiteness and the assemblage – tied up in suburban domesticity, aesthetic practices, and racialized surveillance, we can uncover the beginning of the second process of *immunization* at play in the assemblage. Reading the work of Donna Haraway on the figure of the cyborg, Esposito remarks on the way in which the life of individuals in the present moment is increasingly being preserved by the integration of non-organic, non-living entities into human bodies. Citing the immunitary logic at the heart of this arrangement, Esposito describes it as an ontological shift for human life:

> While up to a certain point human beings projected themselves into the world, and then also into the universe, now it is the world, in all its components – natural and artificial, material and electronic, chemical and telematic – which penetrates us in a form that eliminates the separation between inside and outside, front and back, surface and depth: no longer content to besiege us from the outside, technique has now taken up residence in our very limbs. (Esposito 2011:147)

Although not having physically entered the human body like a surgical implant to which Esposito refers, the intimate and extensive relationship that security technologies have with their targeted bodies suggests that the assemblage may be approaching the precipice of biotechnicization. Viewed from this vantage, the private security assemblage in South Africa can be seen to fulfill all the deepest fears of critics of the neoliberal governance in the post-apartheid. Where the immunitary apparatus of the apartheid state failed, the private security assemblage swoops in, preserving and even improving on the life-giving and death-exposing categories of race in the suburbs.

But before lapsing into too deep pessimism, it is helpful to return to the assemblage not in its design as a grand immunizing force, perfectly preserving, disciplining, and eliminating bodies in its purview, but its on-the-ground functions and dysfunctions:

In a few minutes, Eric had figured through the issue. The woman who had been charged with loading the fingerprints of new employees had not realized that the biometric interface had been running in offline mode. It was an easy mistake to make; the interface hid its status in a dropdown menu. The new hires would have to be rescanned. In the meantime, the office would keep their biometrics doors as they were, propped open with bricks and chairs. Leaving I queried Eric, "Do you find often that these buildings, they have amazing access control systems, but everyone just leaves the door open?" He smiled, "All the time."

As we have seen, the assemblage's design is not the entirety of its reality. Rather, by existing in a city like Johannesburg where visibility and invisibility, rhythm and arrhythmia, openness and rupture overflow and intersect, design is only perhaps only a small part of it character. On the ground, the assemblage functions with its idiosyncrasies, lapsing into moments of excess and ambiguity brought on by the agencies of its constitutive materials and the city's own agentic, communal capacities. It blinds and overstimulates the controllers of W0 while forcing the production of new ways of seeing and knowing; it "sjamboks" guards and runs reactions officers into injury and illness, while tantalizing them with speed and sleep; it encases clients with walls and enclosures, only to be made permeable by aesthetic desires, fragility, and anxiety. And in certain cases, it can become like the alarm in Ivan Vladislavic's (2009) house – a thing that is no longer just odious or constraining to those it targets, disciplines, and utilizes, but also to those it is meant to *immunize*. It becomes reminiscent of what Esposito likens to an auto-immune disease – the overreaction of a immune system onto the *immune* itself. And faced with this autoimmunity, the assemblage, like the biometric system at the merchandising company, must be pushed into dysfunction for life to continue.

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Towards the end of his text, Esposito wonders whether *immunity* is bound to this dystopic trajectory of privilege, elimination, or self-destruction. Cognizant of inevitability and even value of *immunity* as the limit between bodies and dissolutive mutuality, he turns to the human immune system as a guide. Contrary to popular understandings of the immune system which narrate it as

a punitive defense garrisoned bent against foreignness, Esposito illustrates how the actual human immune system is commonly strengthened through non-hostile interactions with otherness. It is biologically cosmopolitan, or as he puts it, “a sounding board for the presence of the world inside the self” (169).

In light of this, we must ask. What are the possibilities of an assemblage like this immune system? For a city neither of walls or bubbles, but of selves with the world inside?

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